

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



ERS-Foreign 293

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY

MAY 12 1970

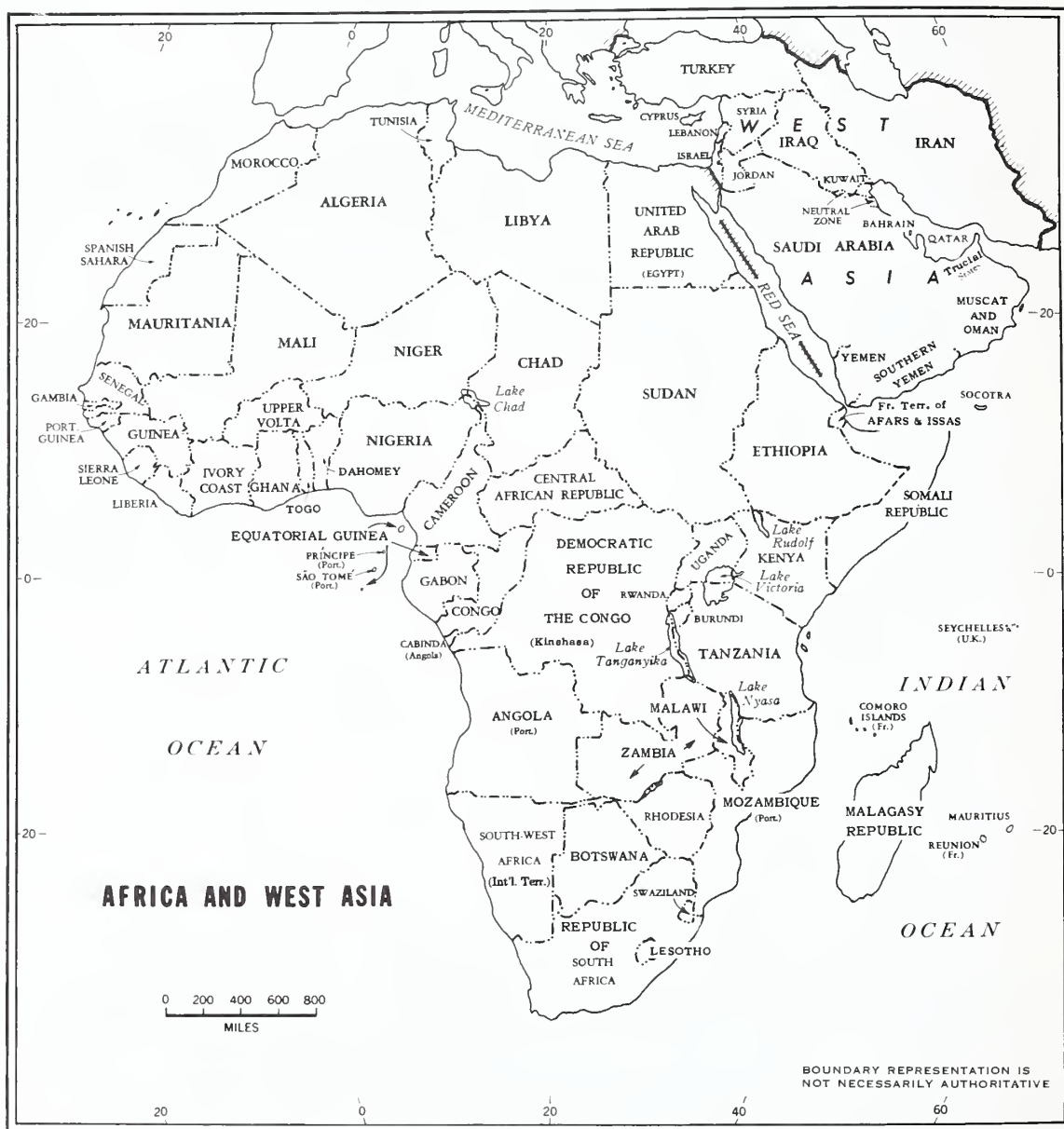
CURRENT SERIAL RECORDS

THE AGRICULTURAL SITUATION IN AFRICA AND WEST ASIA

Review of 1969 and Outlook for 1970

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.



U.S. DEPARTMENT OF AGRICULTURE

NEG. ERS 5944-69(3) ECONOMIC RESEARCH SERVICE

ABSTRACT: Total agricultural output in Africa rose about 2 percent from 1968 to 1969. Twenty-one of 31 African countries covered in the report showed increases; eight had losses. In West Asia, total agricultural production was down slightly in 1969. Five of eight countries covered in the report registered declines. Compared with 1968 levels, both areas experienced declines in per capita food production. The report gives the early-season outlook for 1970 crops by selected countries and commodities, reviews country trade in agricultural products, and covers each country's trade policy in 1969.

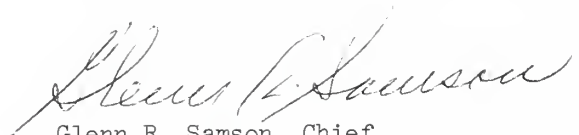
KEY WORDS: Agricultural production in Africa, West Asia.

FOREWORD

This is one of five regional supplements to The World Agricultural Situation: Review of 1969 and Outlook for 1970, FAER 57, issued February 1970. Other regional reports are being published for Western Europe, the Communist Areas, the Western Hemisphere, and the Far East and Oceania.

Highlights of the agricultural year in Africa and West Asia are discussed in some detail in the country writeups. Some countries in that sphere are excluded owing to insufficient data. Tabular data for countries omitted from the text discussion are included in the appendix. U.S. trade data are available for most political entities of the area and are used in appropriate sections of this supplement.

For the Branch, Robert E. Marx directed and coordinated this report. Others participating in its preparation include Mary T. Chambliss, William F. Hall, Marie A. Kelleher, Michael E. Kurtzig, Lillian M. Loeb, Margaret B. Missiaen, Pauline G. Price, Snider W. Skinner, H. Charles Treackle, Joyce E. Wallace, and Cline J. Warren. Agricultural situation reports from the U.S. Agricultural Attaches abroad were helpful.



Glenn R. Samson, Chief
Africa and Middle East Branch
Foreign Regional Analysis Division
Economic Research Service

CONTENTS

	<u>Page</u>		<u>Page</u>
SUMMARY	1	Senegal	20
		Sierra Leone	21
		South Africa, Republic of	22
		Sudan	25
		Tanzania	26
AFRICA:			
Algeria	2	Tunisia	27
Botswana	3	Uganda	29
Cameroon	4	United Arab Republic	30
Congo (Kinshasa)	5		
Ethiopia	6	WEST ASIA:	
		Cyprus	32
Ghana	7	Iran	32
Guinea	8	Iraq	34
Ivory Coast	9	Israel	36
Kenya	10	Jordan	37
Liberia	12		
		Lebanon	38
Malawi	13	Syria	40
Mali	14	Turkey	42
Morocco	15		
Nigeria	17	APPENDIX TABLES	45
Rhodesia	18		

THE AGRICULTURAL SITUATION IN AFRICA AND WEST ASIA

Review of 1969 and Outlook for 1970

SUMMARY

Africa's agricultural outturn for 1969 was almost 2 percent greater than in 1968. The index of total agricultural production rose to 127 percent of the 1957-59 base--a new high.^{1/} Food production per capita faltered, however, and the index dropped to 95, the lowest level of the 1960's, and one point below 1968.

The most significant gain in Africa's production was registered in the UAR, one of the continent's three agricultural giants. Egyptian farmers produced more than ever before. Substantial gains were recorded for major grain crops, with rice production reaching an alltime high of 2.4 million tons.^{2/} But the major factor in the increased performance of Egyptian agriculture was a 17-percent increase in cotton production to 511,000 tons for 1969. This is not a record, but close to it.

South Africa and Nigeria, the other two of the agricultural giants, registered no change and one percent greater production, respectively.

Better crops were harvested in those countries of West Africa where a 1968 drought necessitated emergency food aid, partly from the United States. Senegal, Mali, Niger, and Upper Volta were the main recipients.

Having experienced a superlative year in 1968, Moroccans were not surprised when their agricultural production dropped off sharply--approaching 20 percent--in 1969. Wheat production, for instance, fell about one-third. Even so, it was an exceedingly good crop surpassed in Morocco's history only by the 1968 crop.

Tunisia suffered a considerable decline in farm output--the fourth consecutive year of rather poor crops. Tunisia has not had a good wheat crop since 1965.

A virtual across-the-board rise in production resulted in Africa's 1969 crop of cotton being the largest ever produced. Cotton is one of the top three export crops of the continent.

In West Asia, agricultural output was down slightly in 1969. The regional index of production was 138, while the index of per capita food production was down to 100.^{3/}

Cyprus and Jordan showed very large increases in output. Such small countries are more likely to be affected uniformly by weather than big areas are.

Lebanon's apple crop was severely reduced; only about 40 percent as many apples were harvested in 1969 as in 1968. Not since 1960 were there so few Lebanese apples harvested.

Wheat production in West Asia totaled 14.6 million tons, down by a few hundred thousand tons from the 1968 level. Each of the two biggest wheat growers, Turkey and Iran, experienced a slight drop in the 1969 crop.

Cotton is the largest export crop of West Asia. Regional cotton production in 1969 was about 725,000 tons--off about 7 percent from the very high level of production in 1968. Turkey had a drop of possibly 50,000 tons; 1969 was the first year since 1960 that Turkey did not show an increase in cotton production.

^{1/} Based on production of 31 countries for which indices have been prepared.

^{2/} Metric tons and U.S. dollars are used in this report; exceptions are stated specifically.

^{3/} Based on production of eight countries for which indices have been prepared.

AFRICA

ALGERIA

Early in the season, the 1969 harvest gave promise of being a bumper one. However, adverse weather damaged the cereal crops, causing the final outturn to be down considerably from the previous year. Gross domestic product (GDP) was expected to increase by about 7 percent (at current prices) during 1969 due largely to a substantial rise in industrial production and construction. This was well below the 12 percent growth in GDP of 1968, but slightly above the 1963-67 average.

Agricultural Production

The index of total agricultural production fell to 84 percent of the 1957-59 base, down from 96 percent in 1968. Total grain production has been estimated at between 1.5 million and 1.6 million tons, down considerably from the more than 2 million tons harvested in 1968. The wheat crop (40 percent soft wheat and 60 percent durum) probably slipped to about 1.25 million tons from 1.53 million tons the previous year. Domestic grain consumption requirements likely were considerably above production levels. The value of cereal imports has gone from \$43 million in 1966 to \$59 million in 1967 and back to \$44 million in 1968. These fluctuations are largely due to the influence of the weather on the size of the harvest.

The production and export of wine have posed major problems for the Algerian economy in recent years. Since there is very little domestic consumption of wine, the industry has been dependent on exports--particularly exports to the protected French market. Access to this market, however, has been severely limited in recent years. (See section on trade.)

Algeria is now embarking on a vineyard reconstruction program, which will cost \$400 million over the next 10 years, to reduce the area under wine grapes from 350,000 hectares (865,000 acres) down to 200,000 hectares (495,000 acres). This will reduce annual labor needs by more than 10 million man-days. To compensate for this, the government intends to put an extra 33,500

hectares (83,000 acres) under cultivation of table grapes and 10,000 hectares (25,000 acres) under grapes for raisins. More emphasis will also be put on the production of high-quality wine because of shrinking markets for vin ordinaire.

Production of most fruits and vegetables increased during 1969. Total citrus production was estimated at 440,000 tons, up slightly from the previous year. Heavy rains and floods in eastern and central Algeria destroyed much of the date crop. Algeria will export few if any dates during the current season. Date exports usually total more than 20,000 tons annually.

The rains, which were heaviest during October, also damaged thousands of cropland hectares, some vineyards, and stored crops. Planting for the 1969/70 agricultural season had not begun when the floods came, so damage to annual crops was minimal. Soil moisture conditions should be greatly improved, but some planting may have been delayed or prevented because of wet fields.

Agricultural Policy

Algeria's new 4-year development plan was announced on January 20, 1970. Preliminary information suggests that approximately \$5 billion will be spent during 1970-73 to achieve an annual growth rate of 6 percent in the overall economy. Fifty percent of the expenditures will go to the industrial sector. Agriculture will be the third area of emphasis; education is second.

The Algerian government controls the prices which marketing organizations pay to producers for many commodities. In 1969, minimum prices were in effect for wine, olives, cereals, garden vegetables, and citrus. In 1968 the price for durum wheat was raised from \$103 to \$109 per ton and for soft wheat from \$89 to \$97 per ton.

Foreign Trade

Algeria's total imports during 1968 were valued at \$707 million, down \$7 million from 1967. Agricultural products made up 23 percent of the total compared with 29 percent the year before. A \$15-million

decrease in cereal imports (from \$59 million to \$44 million) reflected the greatly improved 1967 and 1968 cereal harvests. Wheat accounted for almost 90 percent of cereal imports in 1966 and 1967. Other major agricultural imports during 1968 were dairy products worth \$22 million, cotton worth \$17 million, and sugar worth \$15 million.

Algeria's exports continued to expand rapidly during 1968 due largely to increased petroleum exports. The value of total exports rose to \$772 million from \$714 million in 1967.

Agricultural exports increased from \$120 million to \$141 million during the same period. Agriculture's share of the total remained nearly constant at 18 percent. Exports of wine recovered from the low level of 1967. These shipments were valued at \$77 million in 1968 compared with \$56 million in 1967. Improvement in the current wine export situation has been due to several things: a lifting of the French ban on wine imports; a change in French blending regulations for foreign and domestic wines; the USSR's agreement to import 5 million hectoliters (1 hectoliter = 26.4 U.S. gallons) of Algerian wine annually for 7 years beginning in 1968; and reduced wine production in France in 1969 which increased the French demand for Algerian wines. Algerian exports of wine for the first 6 months of 1969 were up almost \$20 million over January-June 1968. Exports of fresh fruit and vegetables to the European market are important sources of earnings for the agricultural sector. Fruit valued at \$27 million was Algeria's second most important agricultural export in 1968. (Margaret B. Missiaen).

BOTSWANA

Agricultural Production

Arid, landlocked Botswana experienced drought the past several years and had to import more food than usual. The most important crops grown are sorghum, corn, millet, beans, cowpeas, cotton, and peanuts. Except for cotton and peanuts, which are exported, these crops are used for consumption. However, sometimes due to storage problems and the disorganization of markets, consumption crops are exported at harvest and reimported at higher prices later in the season.

Production varies greatly from year to year due to the weather. Lack of water is the limiting factor in agricultural production.

The major commercial activity in the country is livestock raising. The long dry period in the early sixties reduced cattle numbers to less than a million; now they have risen to about 1-1/2 million. Over 80 percent of the cattle are owned by traditional farmers; less than 20 percent, by commercial farmers. It has been estimated that Botswana has a carrying capacity for 2-1/2 million cattle on 92 million acres of present or potential grazing land. However, because of lack of waterholes, infestation of tsetse fly, and other problems, much of this potential cannot be realized for some time. Without additional water, cattle numbers cannot increase much; at present there is overgrazing near the waterholes.

The Botswana Meat Commission has located good markets for the meat it processes. There is a strong demand in nearby countries, especially the Republic of South Africa and Zambia. It also sells meat in the European market, mainly the United Kingdom, and is moving into new markets in Africa, for example, Ghana.

Agricultural Policy

Botswana is working under a 5-year development plan (1969-73) aimed at developing agriculture and mineral potential, and the needed infrastructure. There have been several recent mineral discoveries. Diamonds, copper, and nickel are the most promising. The plan provides for the opening and developing of two large mines in the north. It also provides for the development of roads which are greatly needed throughout the country. In the agricultural sector emphasis is placed on the improvement of livestock, mainly cattle, and on range management. The improvements desired in crop production are first to improve subsistence agriculture and to develop a limited amount of commercial production to supply urban dwellers as well as to export.

Foreign Trade

Traditionally Botswana experiences a trade deficit. The most recent estimates available are for 1968 when the imbalance was \$22 million. Exports consist of meat

and meat byproducts, about 90 percent of the total, plus small sales of beans, peas, sorghum, talc, and manganese ore. Meat exports are planned to increase. Exports of minerals should develop rapidly in the 1970's. The main imports are food products and petroleum products and manufactured consumer goods. The Republic of South Africa is by far the major source of imports. Botswana is a member of a customs union with the Republic, Lesotho, and Swaziland. The terms of this union have recently been revised and Botswana will receive greater revenues under the new terms. Free movement of almost all goods will continue among the members. (Mary T. Chambliss).

CAMEROON

Perhaps the most significant economic news in Cameroon in 1969 was the opening of a new 181-mile section of the Trans-Cameroon railroad. This section extends from Yaounde to Belabo. A further extension of 206 miles, from Belabo northward to Ngaoundere, is planned. The United States has agreed to lend \$10 million toward the construction of this extension. France and the European Community are also helping to finance the new railway.

Also of significance is the completion of the "unification highway" between Tiko, West Cameroon, and Douala, East Cameroon. Though only 19 miles long, this road was difficult and expensive to build because it crossed dense mangrove forests and marshes. West Cameroon was formerly British Southern Cameroons and East Cameroon was formerly French Cameroun.

A sugarcane plantation and refinery have been established at M'Bandjok, approximately 60 miles northeast of Yaounde, along the tracks of the Trans-Cameroon railroad. The total investment, by a semi-governmental enterprise, is \$8.6 million. The sugar refinery has a potential capacity of 15,000 tons of refined sugar per year.

In West Cameroon, a poultry feed mill became operational at Muyuka in November 1969. The mill, as well as a poultry extension center at Muyuka, is supported by USAID (U.S. Agency for International Development).

Two new luxury hotels have been opened in Cameroon at Garoua and Yaounde.

Agricultural Production

Coffee and cocoa are the chief export crops of Cameroon. Coffee production for 1969/70 is estimated at 1.1 million bags (66,000 tons), same as the previous 2 years, but more than twice the 1957-59 average. Cameroon produces both robusta and arabica coffee.

As a producer of cocoa beans, Cameroon ranks fourth in Africa and fifth in the world. The 1969/70 crop is estimated at 105,000 tons, down 5,000 tons from the preceding harvest but 42,000 tons above the 1957-59 average.

Agricultural Policy

Growers of several of Cameroon's important export crops receive guaranteed prices for the season for their harvests.

For the 1969/70 season, producers of cocoa beans received 13.9 cents per pound for Grades 1 and 2 and 11.4 cents a pound for off-standard beans.

At the close of calendar year 1969, coffee growers were given a slightly higher guaranteed price. The robusta price was raised from 18.8 cents per pound to 19.1 cents. The arabica coffee price was raised 1.6 cents a pound to 21.2 cents.

For the 1969/70 marketing season, Cameroonian cotton growers received 4.9 cents per pound for white and yellow unginned cotton and 4.6 cents a pound for unsorted, unginned cotton.

Foreign Trade

In 1968, Cameroon's exports and imports were closely matched, with exports being valued at \$189 million and imports \$188 million. Major agricultural exports included cocoa beans and products valued at \$60 million, coffee \$51 million, and cotton \$8.2 million.

According to U.S. trade statistics, Cameroon in 1968 was the 48th largest supplier of agricultural imports to the United

States. These agricultural commodities were valued at \$23 million. Coffee (\$20 million), unmanufactured tobacco (\$1.6 million), and cocoa beans (\$1.0 million) were the largest items. (Snider W. Skinner)

CONGO (KINSHASA)

In 1969, for the fourth consecutive year, Congolese agriculture continued the slow pace of recovery from post-independence turmoil. Preliminary data suggest that the expansion rate in total agricultural production more than equaled the rate of increase in population. Along with major food crops, small gains were reported for the country's three principal export crops--palm products, coffee, and rubber. Favorable climatic conditions generally prevailed, but the greater share of this progress must be ascribed to the return of political stability and pacification of the rural areas.

Growth was also reported for other sectors of the economy. Copper production, the country's key export item, is estimated to have been up 9 percent over 1968's 326,000 tons. Mostly as a result of higher world prices for copper, the Congo enjoyed a balance-of-payments surplus, relatively high government revenues, and rapidly growing foreign reserves during the first three quarters of 1969. These favorable trends very likely prevailed in the fourth quarter.

Monetary reforms undertaken in 1967 have helped to establish a favorable climate for economic development and growth. Besides curbing inflation, they provide incentives to producers and promote exports. However, the latent threat of renewed inflationary pressures still exists and Congolese officials feel that continued prudent fiscal and monetary policies are necessary to retain the gains of the past 3 years. Moreover, economic growth continues to be hampered by serious infrastructure deficiencies, particularly in transportation.

The Congo received considerable foreign aid to encourage development during 1969. The European Economic Community approved a grant of 5.5 million Zaires (\$11 million) for agricultural development. The United States provided large amounts of aid in various forms. Aid was also received from Belgium, France, and various international

organizations. Major agricultural work projects being undertaken include work on rice, cotton, and vegetable production; development of market gardens in urban areas; improved and commercialized production of tobacco, corn, cassava, oil palm products, tea, and pyrethrum; development of cattle herds and veterinary services. There are also projects to improve transportation and other marketing facilities. The major thrust of these efforts is to improve the country's degree of self-sufficiency in basic foods and fibers.

Agricultural Production

The most important increases in 1969 production occurred for rice, corn, cotton, and palm oil. Smaller gains were indicated for most other crops. Even so, farm production remained 10 percent below the 1957-59 level and even further below the country's total agricultural potential.

Cotton growing practically ceased in the mid-1960's. More recently, government efforts to expand cotton output have met with considerable success. Production has increased more than threefold since 1965, reaching an estimated 20,000 tons in 1968 and possibly 40,000 tons in 1969. With continued expansion, the country might well become self-sufficient in cotton production in the immediate future.

With the larger cotton crop has come increased cottonseed output. Some gains were also registered for peanuts and sesame. Palm oil remains the major vegetable oil of the Congo. Its production in 1969 likely neared 220,000 tons, up some 10,000 tons from a year earlier and almost double the 1965 level. Improved prices to producers along with the government's reduction of export duties from 15 to 5 percent on palm oil at the end of 1968 helped to promote greater production and to increase exports. These duties have been further reduced to 3 percent of the oil's export price. Indications are that the vegetable oil industry will make even greater progress during 1970.

Production of most subsistence crops approximates pre-independence levels. This is true for millet and sorghum, pulses, cassava, sweetpotatoes, sugarcane, and bananas and plantains. The major exception

is rice. While increasing, rice production is still less than half the 1957-59 level. Growing urban demand for rice and wheat flour in recent years has been met through greater imports.

Foreign Trade

Along with governmental measures to improve tax collections and expand agricultural production, modifications were made in the country's foreign trade policies. Export duties were reduced or in some cases eliminated in October 1969 to promote exports of the following primary commodities:

	<u>Previous duty</u>	<u>Current duty</u>
	- - -	<u>Percent</u> - - -
Coffee beans.....	16	3
Tea.....	12	exempt
In-shell peanuts.....	20	exempt
Unshelled peanuts....	25	exempt
Palm oil and palm kernel oil.....	5	3
Natural rubber.....	10	5

Meanwhile, efforts were made to discourage greater imports of direct consumer goods. While import duties on some items used by the local industry were reduced, those on other items used directly by the consumer were increased.

During 1969 the Congo signed a number of bilateral trade agreements with neighboring countries. Most Congolese trade is still, however, oriented toward Western Europe--primarily Belgium--and the United States. Exports in 1969 likely were substantially above the \$569 million reported for 1968. By value, agricultural products currently account for one-fifth of all exports. Indications are that the leading agricultural exports--coffee, tea, rubber, and palm products--registered some gains during 1969.

Agricultural imports center around meat and meat products, raw cotton, cereals and cereals products. The value of these imports may well have exceeded returns from farm exports. In recent years, most of the cereals, cotton, and tobacco have been received from the United States under special concessional programs. U.S. agricultural

shipments to the Congo in 1968 were valued at \$14.6 million. Grains and preparations--predominantly wheat and rice--were valued at \$8.5 million. Cotton was next of importance with a value of \$2 million, followed by \$1.6 million for tobacco. U.S. agricultural sales to the Congo will meet with increasing competition from third countries and from local production. U.S. agricultural imports from the Congo are confined almost entirely to coffee, palm products, and crude rubber. The balance of trade between the two countries is usually in favor of the United States. (Cline J. Warren)

ETHIOPIA

Agriculture usually accounts for 70 percent of the country's GNP. The 1969 GNP was estimated at \$1.7 billion for a per capita average of \$69. Ninety percent of the 24.7 million (mid-1969) Ethiopians maintain their existence by subsistence farming and semi-nomadic herding. While relying heavily on coffee exports, the country is exploring other alternatives to diversify and raise revenues. Under the third 5-year plan (fiscal years 1969-73), Ethiopia plans to spend \$137.2 million on agricultural projects. Besides providing more tools, better seed, and other inputs, large tracts of new land will be brought into production using modern farm equipment.

Agricultural Production

Estimated agricultural output of Ethiopian farms increased almost 4 percent in 1969 to an index of 131 (1957-59 = 100).

In 1969, coffee output was not as high as in the previous year even though it was a very good crop. Ethiopia's quota under the International Coffee Agreement was increased by 10,000 tons and prices rose in the latter part of the year. Most of the bonus quota was not supplied in 1969.

Sugar production was estimated at 66,000 tons, down 1,000 tons from 1968, but 1970 production is estimated at 70,000 tons. A new sugar estate and factory came into operation in September. The factory has a rated annual capacity of 29,000 tons that can be raised to 65,000 tons quickly should it be needed. Planners hope the

sugar industry will produce some for export in 1970.

Grain production for 1969 was estimated at 5.5 million tons, up 200,000 tons from the previous year. Drought struck the Eritrea area in 1969 and government officials have initiated action to import 10,000 tons of sorghum (commercial basis) to stabilize prices.

Agricultural Policy

Ethiopia is preparing a new investment proclamation, raising the prospect of more liberal benefits to foreign investors in Ethiopia. Agro-industry investments are recommended as likely to be profitable.

The National Coffee Board, stunned by the economic loss incurred in 1969 by not filling the national coffee quota, has proposed that coffee beans be stockpiled at emergency purchase centers that have transportation routes exempt from seasonal disruption by floods. The outlook for financing this proposal appears bleak. The current highway program will not significantly alter this situation quickly. Higher prices in the latter part of 1969 have spurred some coffee growers into installing washing equipment. Washed coffee brings a premium price. Currently 95 percent of Ethiopia's coffee exports are unwashed beans.

Cattle losses to rinderpest are common in Ethiopia and elsewhere in Africa. The Planning Commission and the Finance Ministry are pledged to support an attack on this disease in south Ethiopia. Nine teams working in the Sidamo and Bale Provinces are scheduled to inoculate cattle with 4.25 million doses of vaccine. In 1972 nine more teams will be added with the task of dispensing 9 million doses. The United States, United Kingdom, and the United Nations are supporting this attack.

Foreign Trade

Agricultural products account for about 95 percent of Ethiopia's annual exports by value. Coffee leads the list of agricultural products, accounts for over half the total, followed by oilseeds, with fruits and vegetables and hides and skins making up most of the rest. Exports in 1969 were estimated at about \$110 million and imports at \$180 million.

Italy, West Germany, and the Netherlands supply most of Ethiopia's imports. The United States usually is the source for around 10 percent of the country's imports. (William F. Hall)

GHANA

Ghana has shown some signs of economic nationalism. Certain commodities can now be sold only by Ghanaians.

As a phase of this economic nationalism, illegal aliens were ordered to leave Ghana in November 1969. Great confusion ensued among the refugees and some hardship resulted. In Ghana, the docks at Takoradi and the fishing port at Tema, traditionally manned by laborers from Niger, were left undermanned. Certain products, usually sold by itinerant traders from Nigeria, were temporarily in short supply. These commodities included spring onions, potatoes, yams, beef, charcoal, and kerosene.

Aliens make up a significant part of the labor force in the country's cocoa areas. Apparently, the deportation order was not enforced with as much vigor there as elsewhere. The harvesting, fermenting, drying, and marketing of cocoa beans moved ahead at about the usual pace.

During 1969 the Volta Aluminium Co. announced plans to raise the smelter capacity at Tema from 112,000 tons to 147,000 tons, at a cost of \$24 million. This increased capacity will coincide with the installation of two new generators at the Volta Dam at Akosombo. These generators are being financed by loans from Canada and the World Bank.

In 1969, various new enterprises were opened in Ghana, including an oil palm mill at Asraku, and cement, garment, and razor factories. Plans include paper and lime (mineral) factories and a new brewery. A Japanese automobile manufacturer has opened an assembly plant in Ghana.

The World Bank is providing financial assistance for a \$35 million highway, linking Ghana's major cities--Accra, Kumasi, and Takoradi.

Agricultural Production

Ghana's agricultural output very likely rose about 6 percent in 1969 to an index of 143 (1957-59 = 100). Production of the major crop, cocoa beans, is estimated at 400,000 tons for the 1969/70 harvest season, up 18 percent over the 1968/69 crop. The world price remains favorable to the producing countries but not all of it trickles down to the Ghanaian cocoa farmer. In June 1969 the price paid to producers by the Cocoa Marketing Board was raised to 8 new cedis per headload of 60 pounds (13.1 cents per pound). This compares with the price of 7 cedis per headload paid during the 1968/69 main-crop season. The new price is still considerably below the prices paid cocoa growers in Nigeria and Cameroon.

Foreign Trade

In 1968, gold was a distant second to cocoa beans as an earner of foreign exchange. Total Ghanaian exports, agricultural plus nonagricultural, were worth \$332 million. Total imports in 1968 were valued at \$306 million.

According to trade figures furnished by the U.S. Census Bureau, Ghana in 1968 was America's 47th best customer for agricultural exports. Of \$19 million in farm products sent to Ghana, the largest items were rice valued at \$7.3 million, animal fats and oils \$2.9 million, unmanufactured tobacco \$2.8 million, cotton, \$2.7 million, and wheat \$1.5 million.

In return, Ghana was the 29th largest supplier of farm products to the United States. Valued at \$46 million, cocoa beans accounted for 94 percent of U.S. farm imports from Ghana. (Snider W. Skinner)

GUINEA

Agricultural output for Guinea in 1969 probably improved over 1968 as normal weather conditions prevailed during the growing and harvesting seasons. Since agriculture accounts for two-thirds of gross domestic product and provides a livelihood for some 70 percent of the population, the growth of the Guinean economy is directly influenced by the level of agricultural output. GDP in 1967/68 was estimated at \$660 million

(when converted at the official rate of 247 Guinea francs per dollar), an increase of 7 percent over the previous year. Guinea's long-term growth rate is much below this level. Agriculture's importance in the economy will decline, as the mining and exporting of bauxite become more important.

Agricultural Production

The index of total agricultural production rose 4 points in 1969 to 114 percent of the 1957-59 base, while per capita production remained at an index of 83. Accurate data on Guinea agricultural production are not readily available. Generally, rice forms the basic food in the diet; and domestic production--estimates for 1969 ranged between 350,000 and 400,000 tons--is insufficient. That means large imports are required each year. The United States is an important supplier of rice to Guinea under P.L. 480. The United Nations, the USSR, and Yugoslavia are assisting Guinea in its plan to add 28,000-30,000 hectares (approximately 70,000 to 75,000 acres) to domestic production. Cassava, sweetpotatoes, corn, and fonio (*Digitaria exilis*) are the other major components of the average diet. Production of all these crops is trending upward.

Bananas, coffee, palm kernels, pineapples, and peanuts are the important export crops. Banana production decreased after independence when the foreign owners of plantations left the country and many plantings were attacked by disease. The government is attempting to regain the previous status of this crop by increasing the cropped area, bringing plant diseases under control, and finding new export outlets primarily in Eastern Europe.

Coffee production is not increasing due largely to the effects of disease. Exports have been limited because of ICA quotas and because of clandestine shipments across Guinea's borders. All this points to production not expanding rapidly in the near future.

On the other hand, production of pineapples has increased since independence. Eastern European countries have been paying above world market prices for Guinea pineapples, and this has aided in an expansion of the area devoted to them. Palm kernel

and peanut production are trending upward; more of these are being processed in Guinea.

Agricultural Policy

Guinea subsidizes its agricultural exports through Guinexport, the state marketing organization. In 1967/68, the export subsidy on bananas was 31 percent, on coffee 56 percent, on peanuts 92 percent, on palm kernels 143 percent and on pineapples 147 percent. Producer prices and therefore export subsidies were reduced somewhat in 1968/69.

Guinea has a comprehensive system of price controls. Changes in official prices have been very slow. As a result of the limitation on imports and price ceilings, an unofficial marketing system developed. This has operated, in large part, by selling Guinea products in neighboring countries and buying consumer goods for resale in Guinea at very high prices. To solve this problem, Guinea established regional marketing agencies to provide a closer link between producers and the state marketing system.

Foreign Trade

Guinea's total imports for fiscal 1968/69 are estimated at \$65 million. That contrasts with the \$50 million figure for 1967/68. Preliminary figures indicated that agricultural imports surpassed \$13 million in value, almost double the previous year's total. All major categories of food imports increased substantially between 1967/68 and 1968/69--rice imports jumped from \$3.1 million to \$6.1 million, wheat flour from \$1.4 million to \$3.1 million and sugar from \$1.2 million to \$2.3 million.

The value of Guinea's exports increased only moderately in fiscal 1968/69, according to preliminary estimates. Exports were worth \$57 million, compared with \$53 million in 1967/68. Agricultural exports also increased--from \$18 million to \$21 million--during this same period. The most important agricultural exports were coffee worth \$5.6 million, pineapples worth \$4.0 million, bananas worth \$3.9 million, and palm kernels worth \$3.8 million.

In 1969, Guinea signed another P.L. 480 agreement with the United States, this one

for \$7.5 million worth of wheat flour, rice, soybean oil, tallow, nonfat dry milk, and cotton. Guinea agreed to continue efforts to stabilize its economy, prevent inflation, improve its agricultural production and especially to promote rice culture. (Margaret B. Missiaen)

IVORY COAST

The Ivory Coast GNP for 1967 was estimated at \$1.07 billion or \$276 per capita. Industrial output in 1969 was at more than five times the 1960 level while agricultural output was nearly double. Annual economic growth has been above 10 percent in recent years. It is expected to level off at about 5 or 6 percent over the longrun.

Rapidly rising consumer prices are of considerable concern to the government. In 1968, prices were at 141.8 percent of the 1960 level, compared with 137.2 percent in 1967. Part of the problem results from a 14.2 percent currency devaluation the Ivory Coast (and the rest of the franc zone) underwent in August 1969. The government has tried to curb inflation by establishing selected price controls.

Foreign investment in the Ivory Coast now exceeds \$400 million. Much of the investment is in rural areas. This helps to lessen the problems of urban unemployment.

Les Grands Moulins, Ivory Coast's flour mill, increased its output of flour from about 55,000 tons in 1968 to 60,000 tons in 1969. Only French soft wheat is milled. The company plans to install machinery and ovens for making biscuits and macaroni.

SACO (Societe d'Africaine de Cacao) received about 30,000 tons of domestic cocoa beans for processing in 1969.

During 1968 palm oil processing plants were completed at Eloka and Toumanguie. Another plant was scheduled for completion in 1969. Three more will be ready by the end of 1970. A total of 8 new plants are scheduled for completion by the end of 1973. These mills will be needed to process the harvest from massive plantings of hybrid oil palms, now beginning to bear.

Near Abidjan a large modern plant soon will manufacture Dutch wax print cotton cloth. Another long-established textile complex is located at Bouake.

A new pineapple cannery, with an annual capacity of 30,000 tons, will be built in the Bonoua area, near Abidjan. The Ivory Coast already has pineapple canning plants at Ono Lagoon and at Tiassale on the west bank of the Bandama River.

A new fertilizer plant has been built at Vridi. It is due to be in operation at the end of 1970.

Agricultural Production

In 1969, agricultural production rose 8 percent to an index of 191 (1957-59 = 100). Cotton production had exceeded goals in several years, but failed to do so in 1969. The goal was 50,000 tons of seed cotton (17,000 tons of cotton lint); actual production was 38,000 tons of seed cotton, in contrast to 45,000 tons the year before.

Although oil palm and coconut palm areas have been greatly expanded in recent years, most of these new trees had not started bearing in 1969.

The Ivory Coast economy is still largely dependent on the coffee and cocoa crops. The year 1969 was not a good one for coffee farmers, since excessively heavy rains reduced the 1968/69 crop by about a fourth from 1967/68, to 204,000 tons. Most of the income from the 1968/69 crop was received by the coffee growers in calendar year 1969. The effect of the poor crop was less serious for the government, which was able to maintain the level of export sales. The 1969/70 coffee crop is estimated at 240,000 tons.

The 1969/70 cocoa crop is estimated at 160,000 tons, up 11 percent over the 1968/69 crop.

Foreign Trade

The year 1968 was the 21st consecutive year that Ivory Coast maintained a favorable balance of trade. Exports in 1968 were valued at \$377 million and imports at \$279 million.

Agricultural exports account for over 80 percent of Ivory Coast's total exports.

In 1968, coffee and cocoa exports made up 53 percent of total exports. France was Ivory Coast's best customer.

In 1968, agricultural imports amounted to \$42 million or 15 percent of total imports. France supplied \$139 million (about half) of Ivory Coast's imports, agricultural and nonagricultural.

In 1968 the United States imported \$75 million worth of Ivorian farm products. Of this amount, \$59 million was in coffee and \$14 million in cocoa beans. The Ivory Coast is the 22nd largest supplier of farm products to the United States.

U.S. agricultural exports to Ivory Coast in 1968 were quite small, totaling \$371,000. Major items were \$163,000 in rice and \$44,000 in tobacco. Total U.S. exports to the Ivory Coast were valued at \$12 million. (Snider W. Skinner)

KENYA

Kenya continued its steady economic growth during 1969, its sixth year of independence. Agriculture provides a livelihood for over 75 percent of Kenya's 10.8 million people. Agriculture, which also contributes about 35 percent of the gross national product, had two better than average years in a row--1968 and 1969, during which time the first 5-year development plan was completed and a second one was launched. This new plan gives priority to rural farming areas by increasing their financial share of the country's economic growth.

Due to Kenya's wide range of altitudes there is considerable variation in climate, from temperate to tropical. This variation allows Kenya to grow a variety of farm products. Since Kenya has a limited area under irrigation, much of the agricultural bounty fluctuates with the amount, the timing, and the distribution of rainfall.

Weather in 1969 generally favored crops. But coffee, Kenya's leading export crop, did not produce at the expected level. It escaped serious damage by the troublesome coffee berry disease, only to have the harvest reduced when cool weather persisted during July and August, delaying harvesting and drying.

Early in the 1969/70 season a normally good year was expected as the weather in the closing months of 1969 held no surprises. Some areas had received above average rainfall and in other areas the rains had been below average.

Agricultural Production

Generally agricultural production improved over 1968. Preliminary estimates for 1969 show an index for agricultural production at 165 (1957-59 = 100), 2 points above the prior year.

Kenya has built a grain store at Nakuru, adding about 18,000 tons of storage capacity to the country's granaries. The new unit is managed by the Kenya Farmer's Association for the Wheat Board.

Corn, Kenya's largest grain crop, with an estimated production of 1.4 million tons, was about 200,000 tons below the 1968 crop. Corn and sisal were the major crops to produce below the 1968 level.

The coffee crop in 1969 escaped serious damage by the coffee berry disease which now appears to be effectively controlled. Cool weather during July and August delayed harvesting. Kenya's coffee crop, estimated at 50,000 tons was a little bigger than the 1968 crop.

Tea production, which in 1968 made a 32 percent gain with a harvest of 30,000 tons, climbed to 36,000 in 1969. Kenya's tea production has risen progressively since independence, and further progress is likely. The tea is still coming from relatively young bushes.

Raw sugar production reached a record 125,000 tons in 1969, after a rise to 100,000 tons in 1968, from a previous high in 1967 of 64,000 tons.

Livestock products have been steadily increasing over the last decade, but their contribution of about one-third of the aggregate value of all agricultural production has changed very little.

Livestock gains no doubt reflect the efforts made to improve range and improve quality of native cattle by using Boran breeding stock. Also, milk production

schemes have brought fluid milk to supply urban markets. Through the Kenya Cooperative Creamery small-scale Kenyan farmers have taken over the supply of fluid milk to replace that which used to be supplied by those European farmers who have dropped out of farming.

Agricultural Policy

The marketing of most agricultural commodities is under some 20 statutory boards and commissions, mostly under the jurisdiction of the Ministry of Agriculture. These authorities may be purely regulatory--such as determining quotas, setting standards, issuing licenses--or they may handle, process, and market products and function as development agencies. Some boards fix prices but policies between boards differ, and a few administer funds for price stabilization. Board activities are supported by funds collected through license fees, cesses, government loans, and grants.

Kenya's farmers are served by some 1,000 cooperative societies which supply inputs, regulate quotas, supply credit, and provide marketing services. In 1968, a National Training College was established with Scandinavian assistance to train personnel for cooperative management.

In 1960 the government began the One Million Acre Settlement Scheme for purchasing 1.2 million acres for the settlement of African farmers. The purchasing for the scheme was practically completed in 1969. This scheme is estimated to involve almost 34,000 families who will derive a living directly or indirectly from the program.

The government has also assisted its farmers in taking over large-scale farms that have changed hands since independence.

Published in December 1969, a new development plan set as a goal an economic growth rate of 6.7 percent a year. This is 0.4 percent higher than the target set and achieved under the first plan.

Kenya, Tanzania, and Uganda, form a regional common market that maintains a common external tariff and customs administration.

Foreign Trade

Kenya's exports amounted to about \$236.6 million in 1968, 57 percent of which were agricultural. The major farm commodities traded were coffee, tea, corn, pyrethrum (flowers and extract), hides and skins, and vegetables. The United States ranked fifth as a destination of Kenyan products by taking about 11 percent of Kenya's farm exports.

Kenya's imports totaled \$355.9 million in 1968 and of this total 9.2 percent were agricultural imports. Cereals and cereal preparations, fruits and vegetables, edible fats, and tobacco were the principal items. The United States ranks sixth as a supplier of total imports, but supplied only some 3.6 percent of the agricultural imports. (H. Charles Treakle)

LIBERIA

Liberia's two main earners of foreign exchange, iron ore and rubber, are priced in world markets, but not in its own. The iron ore price has stabilized at a rather low \$7 to \$8 per ton. Some of the already rich Liberian ore is being concentrated by a large pelletizing plant in Liberia. The pelletized ore sells at about \$11 per ton. A second pelletizing plant, with a capacity of 2 million tons per year, is under construction at Bong, at a cost of \$45 million.

Rubber prices are at a reasonably high level. Production of rubber in Liberia continues slowly upward.

U.S. investors are heavily involved in iron ore and rubber in Liberia.

A company from Oregon has obtained a concession on 1.5 million acres of timberland and will build a sawmill and subsequently veneer and plywood plants. The company's total investment will be about \$10 million. This is the first time that Liberia's forests have been utilized on such a large commercial scale. This new industry will add some welcome diversity to Liberia's economy.

Due to overly enthusiastic acceptance of supplier credits, in years past, Liberia has an external debt of about \$257 million,

rather large for a country of its size, population, and wealth. In 1969, a repayment of \$17.6 million was due but was rescheduled so that only \$13.9 million had to be repaid.

Agricultural Production

In 1969, Liberia's output of agricultural commodities rose nearly 2 percent from the 1968 level and reached an index of 121 (1957-59 = 100).

For years, the government has sought self-sufficiency in rice, the country's staple food. Research has indicated that Liberia has the land, water, and cultivators to produce rice enough and to spare. In actual practice this has now worked out and each year Liberia imports about 40,000 tons of rice to supplement domestic production.

In late 1969, Liberia started a new multi-donor rice program in Loffa County under the direction of the United Nations Development Program, which also contributes financial aid. Others contributing technical and other support include USAID, the U.S. Peace Corps, and the Chinese Agricultural Mission. Reportedly, the Liberian government will pay \$550,000 toward this project.

Oil palm production in Liberia is expected to increase in the near future. One 5,000-acre plantation planted to improved hybrid palm trees is beginning to produce. An oil extraction factory is being built; capacity will be 40 tons of fruit bunches per hour. A second plantation has 750 acres planted to oil palms and expects to plant additional areas over the next few years. A third plantation is in the planning stage. It is expected that farmers in the areas surrounding these plantations will market their oil palm fruit through the plantations.

Foreign Trade

In 1968, Liberia had exports valued at \$169 million and imports valued at \$108 million, giving an apparent favorable balance of trade of \$61 million.

The total value of major agricultural exports was about \$32 million, consisting

of rubber worth \$26 million, coffee \$2.9 million, palm kernels \$1.9 million, and cocoa \$1.3 million. Major nonagricultural exports included iron ore valued at \$118 million, diamonds \$9.1 million, and logs \$1.5 million.

Liberia is America's 45th largest supplier of agricultural products. In 1968, these amounted to \$25 million, of which \$22 million was crude rubber and \$2.8 million was coffee.

The United States is Liberia's major market for all exports and for agricultural exports. The United States is also the major supplier of all imports and of agricultural imports. (Snider W. Skinner)

MALAWI

Agricultural Production

Production gains in all crops except tobacco, corn, and tung oil boosted 1969 cash receipts for most farmers. Total payments to farmers by the Farmers Marketing Board rose to about \$12 million; this exceeded the 1968 figure but smaller than the record \$14.4-million payout in 1967. In 1969 producer prices rose for corn, rice, some pulses, and fire- and sun-cured tobaccos. Cotton and peanut prices remained unchanged.

Production of tea, one of Malawi's major commercial crops, was a record 17,000 tons in 1969. Most of its tea is sold to the United Kingdom for blending, but an increasing part of the crop is being sold to the Republic of South Africa. Production will probably continue its upward trend in 1970. The official production target for 1975 is 20,000 tons. Production of tobacco, the other major commercial crop, fell in 1969 to possibly only 12,000 tons; however, the average price received was up and 1969's crop exceeded 1968's in value. The United Kingdom is also the largest purchaser of Malawi tobacco. Some tobacco finds a market in West African countries.

Peanuts are usually Malawi's third most important export crop; commercial production in 1969 was about 40,000 tons, far above 1968 production. About 10 percent of the crop usually is purchased by the local

oil-crushing industry; the rest is exported. Cotton production did not reach the original forecast for 1969; however, it did exceed 1968 production. Increasing cotton output is receiving high priority by the government development program. Cotton lint vies with corn for fourth place in Malawi's agricultural exports.

Corn is both a commercial and a subsistence crop. The exact amount of subsistence production is unknown; FAO estimates it is about 1.2 million tons. The commercial crop in 1969 was 64,000 tons, down from 1968 production. One reason for the corn decline is that farmers are shifting to cotton, peanuts, and rice as commercial crops. The government is especially encouraging rice production. About 50 rice experts from Taiwan are presently in Malawi. There is a good market for quality rice in the Republic of South Africa. Sugar, Malawi's newest commercial crop, has been very successful. Production now exceeds domestic needs and some is available for export.

The crop outlook in early 1970 is favorable. Improved weather, government expansion programs (including better prices), greater assistance to progressive farmers, and an estimated 60-percent increase in the use of fertilizer point to possible record crops. Significant gains are forecast for all types of tobacco. Although minimum corn prices are down slightly for 1970, commercial production is expected to increase. Tea production should continue upward. A slightly larger sugar crop is expected to provide more for export. Livestock production is showing signs of steady progress and both the size of the cattle herd and the off-take rate are expected to increase.

Agricultural Policy

The newly established Ministry of Agriculture has formulated a "new look" policy. It will concentrate on efforts to increase productivity of individual progressive farmers rather than of the mass of farmers as in the past. The government is also trying to improve marketing conditions and prices and to provide better technical and financial assistance. The country's three major development projects--at Salima, Lilongwa, and Chikwana--are now well established and should start paying dividends

in the form of increased production. Settlement and irrigation schemes continue to expand.

Foreign Trade

Trade data for all of 1969 are not available. However, for the first half of the year the trade deficit was \$12.7 million. Imports were up by over 8 percent and exports showed a small decline from the like period in 1968. Data for the first half of the year also indicate that imports from the Republic of South Africa have increased greatly.

Total exports in 1968 were valued at \$48.1 million, of which agricultural exports were \$38.1 million. Tobacco was the largest export, \$12.7 million. Tea was second at \$11.6 million. Peanut exports were \$5.5 million and corn exports were \$3.6 million. The United Kingdom was by far the largest buyer of Malawian exports. Total imports in 1968 were \$69.8 million; agricultural imports were only \$9 million. The largest agricultural imports were dairy products, wheat flour, fruits and vegetables, and beer. The United Kingdom was the major supplier followed by Rhodesia and South Africa. (Mary T. Chambliss)

MALI

Mali, after experiencing a severe drought during the 1968/69 crop year, has recovered with a good harvest during the present season. The large food imports, necessitated by the very poor crop outturn last year, are not expected to be repeated. There is a very good chance that Mali may rebuild its depleted grain reserves.

Per capita gross domestic product in Mali was estimated at \$46 in 1967/68. Because of the poor crop, there most likely has been little economic growth in Mali since 1967. With the improved agricultural situation for the present season, growth in real terms should again accelerate.

Agricultural Production

Agricultural production in the 1969/70 season rebounded from a bad year by increasing an estimated 17 percent to an index of 130 (1957-59 = 100). Grain output of 1.4

million tons will allow Malians to have adequate supplies and to replenish some of their depleted reserves. Livestock production is returning to its position of importance, but because herds were so adversely affected by the drought in 1968/69, it will require at least 2 years to rebuild animal numbers to their previous level. For this reason, meat production in 1969/70 is expected to remain below average.

After several years of declining marketings, Mali's commercial sales of peanuts are expected to move upward in the 1969/70 marketing season. It is expected that 50,000 tons will enter commercial channels, compared with 30,000 tons last year. Total 1969 peanut production is estimated at 120,000 tons. Peanuts are grown on about 7.5 percent of the total cultivated area and are an important foreign exchange earner. The higher producer prices offered for peanuts this season are expected to reduce movement of Malian peanuts into neighboring countries.

Mali has a peanut development project, partly financed by the French Development Fund (FAC), to provide extension services, agricultural equipment, and production supplies. Average yields resulting from the project increased from 500 to 800 kilograms per hectare during the drought year, whereas yields from areas not under the program were drastically reduced. Some 49,000 hectares (121,000 acres) are covered by the program with the expectation that this will be increased to 63,000 hectares (156,000 acres) for the 1970 crop.

Cotton has become the most important export crop in Mali, and covers about 4 percent of the cultivated area. The French Textile Fiber Development Company has been instrumental in expanding cotton production in its zone. Production in 1969/70 is expected to reach 63,000 tons of seed cotton. Exports of cotton fiber reached 16,000 tons in 1968/69 despite the growing demand by Mali's own textile mill at Segou.

Agricultural Policy

As an incentive to farmers, the government has raised producer prices for the 1969/70 season between 15 percent and 30 percent for peanuts, cotton, rice, millet, and sorghum. The prices paid for livestock delivered to the modern slaughter house in

Bamako have also been raised to encourage increased marketings.

Mali has a price stabilization fund which operates to support the prices of peanuts and cotton for export and to subsidize retail prices of basic consumption goods so they can be sold at the same price all over the country.

Foreign Trade

Total imports for 1968 were valued at \$34 million. France continued to be Mali's largest supplier of goods, accounting for 32 percent of the total. Major agricultural imports were 31,000 tons of sugar valued at \$4.2 million, cotton and textiles valued at \$2.6 million and kola nuts valued at \$1.2 million.

Exports worth \$10.7 million were recorded by the government. However, import patterns of neighboring countries indicate that clandestine exports almost equaled total recorded exports. Officially the most important agricultural exports were cotton fiber worth \$4.0 million, livestock worth \$1.4 million, and peanuts worth \$1.2 million. Livestock exports are seriously underreported. An estimated 120,000 cattle and 160,000 sheep and goats were actually exported each year, compared to the 44,000 cattle and 19,000 sheep and goats recorded in the official statistics for 1968.

To meet emergency food needs during 1969, Mali purchased 20,000 tons of rice from Thailand and Egypt and 16,000 tons of millet from Argentina. The United States provided 15,000 tons of corn under P.L. 480. France donated 3,500 tons of flour. The Common Market has granted an additional quantity of food grains to Mali to arrive during 1970. The amounts are reported to be 20,000 tons of corn and 30,000 tons of flour. (Margaret B. Missiaen)

MOROCCO

Excessive and untimely rainfall helped cut overall agricultural production in 1969 from bumper 1968 levels. Total output was still well above average--the 1.6 million-ton wheat crop was the second largest on record. The gross domestic product growth rate which was 13 percent in 1968 leveled

off in 1969, reflecting the strong influence of the agricultural sector on GDP movements.

The outlook is mixed for crops to be harvested in the spring and summer of 1970. Severe flooding in the Gharb, one of the richest agricultural areas in Morocco, damaged cereal, citrus, and sugarbeet crops in the region. While some replanting was possible after the floodwaters receded, damage in the area was nevertheless substantial. Rainfall was much heavier than normal throughout the country.

Agricultural Production

The 1968/69 agricultural season was disappointing when compared with the recordbreaking crops of the previous year. By any other standard, however, the 1969 harvest was a good one. The index of agricultural production was 135 percent of the 1957-59 average down from 162 in 1968.

Wheat output (estimated at 1.6 million tons) and barley production (at 1.3 million tons) were 30 percent below record levels of the preceding year due to the rains and resultant widespread leaf blight and rust in both Mexican and traditional varieties. Despite this drop total production of these major cereals was above average. The quantity of wheat entering commercial channels from the 1969 crop was not expected to exceed 305,000 tons or 19 percent of the total crop against 786,000 tons or 33 percent commercialized in 1968. An estimated 44,000 hectares (109,000 acres) of cereals, mostly wheat, were flood damaged, involving a loss of possibly 60,000 to 70,000 tons for the 1970 crop.

Early-season estimates of the 1969/70 citrus crop were for record production of almost 900,000 tons. The crop was early and of good quality, two factors which would bring premium prices for exports. The recent floods in an important citrus-growing area have reduced the prospects considerably. Approximately 5,000 hectares (12,000 acres) of citrus were affected to varying degrees. It is estimated that there will be an export loss of up to 60,000 tons, representing possibly \$3 million. The citrus processing industry is expanding rapidly in Morocco. From the 75,000-80,000 tons finished in 1968/69, processing should increase to 200,000 tons by 1975. The

percentage of the crop processed depends more on fruit quality than on harvest volume.

The 1969/70 olive crop was reduced by 50 percent from a year earlier to an estimated 140,000 tons. The cutback reflects an off-year in the production cycle and adverse weather. Estimated oil output from the current crop is not expected to exceed 20,000 tons, which would be only 40 percent of the record large output from the previous olive crop.

Agricultural Policy

On July 29, 1969, government enacted an Agricultural Investment Code in an effort to arrive at more effective and economic land utilization. The Code recognizes the right to private ownership of farms but asserts that the owners must use their land in the national interest and reimburse the government for a part of its investments to improve the land. For example, farmers enjoying the benefits of irrigation will be required to pay approximately 40 percent of the cost. The farmer's contribution will consist of a fixed charge and payments for water. Plots of 5 hectares (about 12 acres) or less and the first 5 hectares of plots of 20 hectares (50 acres) or less will be exempt from the tax.

The USAID continued to support a cereals improvement project in Morocco. Activities include breeding and varietal development, research on fertilizer use, and production-management techniques. Efforts are being made to adapt the new high-yielding varieties of Mexican wheat to Moroccan conditions. Despite the Septoria blight problem encountered last season with the Mexican varieties, there is still considerable farmer interest in these varieties. A voluntary program with a minimum goal of 10,000 hectares (25,000 acres) was established and was expected to attract primarily the large modern operators. The recent floods had only a minor effect on the Mexican wheat, since there were limited plantings in the Gharb.

Foreign Trade

Morocco's total exports were valued at \$450 million in 1968, up \$26 million from 1967. Agricultural goods accounted for 45

percent of this total. Citrus fruit was the most valuable agricultural export followed by fresh tomatoes and dried pulses (peas and beans). On a crop year basis, 1968/69 citrus exports were down 65,000 tons to 533,000 tons. Early estimates of exports from the 1969/70 crop were as high as 750,000 tons. But these figures have recently been revised downward to about 700,000 tons, considerably above the levels of recent years. While Russia normally imports from 100,000 to 150,000 tons of oranges under a clearing account, the bulk of the exported citrus goes to Western Europe, principally France. During the first 10 months of 1969, Morocco exported almost 33,000 tons of olive oil from last year's press compared with an average of less than 7,000 tons for the 3 previous years.

The value of Morocco's total imports rose from \$518 million in 1967 to \$551 million in 1968. Agricultural products made up 32 percent of this total. Wheat was the most important agricultural import followed by sugar, vegetable oils, and tea. Morocco's need to import wheat varies rather widely from year to year depending on the size of the harvest. During calendar 1969, Morocco imported only small quantities of wheat as a part of the "food-for-work" program. Heavy carryover wheat stocks on June 30, 1969, offset the reduced 1969 crop and no imports had been required through early 1970. However, with a somewhat lower rate of commercialization and declining stock levels in normally deficit areas, imports of an estimated 150,000 tons of wheat are being arranged to arrive prior to June 30, 1970.

Under the associate status granted Morocco by the European Community, effective September 1, 1969, certain Moroccan agricultural products, principally fresh citrus (excluding grapefruit) and olive oil, imported into the EC will receive preferential treatment. From the Moroccan side, tariffs were reduced on a number of manufactured goods on September 1, 1969. While the reductions were on a most-favored-nation basis, they were of particular interest to EC exporters.

An important Moroccan-Cuban pact signed in December 1969 covers the 1970-72 period. Principal trade commodities are Cuban sugar (a total of 300,000 tons) and

Moroccan phosphate (120,000 tons). (Margaret B. Missiaen)

NIGERIA

The big news in Nigeria in early 1970 was the end of the civil war, which had been going on for 2-1/2 years.

The immediate problem has been the feeding and general welfare of the many refugees in the east. With offers of international aid coming in added to the resources available domestically, Nigerian officials believe the major part of the problem should be solved within the year. By the end of 1970, Nigerian agriculture should once again be able to supply virtually all of the country's basic food needs.

Reconstruction of the war-torn area is a longer-range problem. Most important to agriculture will be the repair or reconstruction of roads and railroads.

Nigeria's reconstruction is expected to be greatly helped by the resurgence of the country's petroleum industry. Several large international companies are tooling up to increase their petroleum extraction and refining operations. Other oil companies are seeking concessions.

Postwar recovery will be aided by the greater supply of electricity now available. Most of the increased electrical capacity comes from the hydroelectric generating plant at the Kainji Dam, which went on the line in December 1968.

Economically speaking, Nigeria emerged from the war in good shape. The war was mostly funded on a pay-as-you-go basis and no large war debt was incurred.

The government plans to rename its unit of money, the Nigerian pound, and also to adopt a decimal sub-unit. The Nigerian pound, now worth \$2.80, is divided into 20 shillings, which are subdivided into 12 pence each.

Agricultural Production

Total agricultural output is estimated to have risen 1 percent in 1969 from that in 1968. Except for oil palm produce and

rubber, farm production was not affected severely by the war. Production of palm oil and palm kernels had shown considerable recovery even before the war ended and additional improvement is expected for 1970. Much of the palm oil will be consumed domestically but a larger supply of palm kernels and/or palm kernel oil will be available for export.

Production of peanuts for 1968 was up as compared with 1967. In turn, the 1969 crop was somewhat larger than in 1968, although cotton is said to have encroached into peanut areas to some extent. There was some temporary buildup of inland peanut stocks from the 1968 harvest due to slow shipment to the coast. This, in turn, was due to a shortage of coal to run trains, deterioration of highways from heavy use, and congestion at the port of Apapa (Lagos).

Cocoa production during the 1969/70 season is estimated to be up from last year although weather conditions were less than ideal. Most observers feel that the announcement in the spring of 1969 of a 50 percent increase in the producer price of cocoa beans stimulated more and better cultural practices by cocoa farmers. This increased production this year and seems to foretell a bright future for Nigerian cocoa.

Nigerian cotton production during the 1969/70 season was at an alltime high. Better producer prices and good weather were primarily responsible for the increase. Nigeria's cotton textile industry continued to expand in 1969 and the demand for locally-grown cotton was good.

Foreign Trade

In May 1969, export duties on many important agricultural exports were increased from 10 percent to 15 percent. Commodities affected are: sesame seed, cocoa beans, lint cotton, cottonseed, peanuts, peanut cake and meal, peanut oil, palm kernels, palm kernel cake and meal, palm kernel oil, and palm oil (edible and technical).

Though wracked by civil war during all of 1968, Nigeria managed to export goods valued at \$578 million. Since less petroleum than usual was exported, agriculture's

70-percent was larger than in years just prior to 1968.

Major agricultural exports in 1968 consisted of cocoa beans and products valued at \$162 million (40 percent of agricultural exports), peanuts and products (\$146 million or 36 percent), and oil palm products (\$41 million or 10 percent). Other agricultural products included rubber worth \$18 million, cotton lint and seed \$12 million, hides and skins \$11 million, benniseed (sesame) \$3.3 million, shea nuts \$2.4 million, gum arabic \$1.7 million, coffee \$1.4 million, and soybeans \$1.3 million.

Since the civil war began in Nigeria, agricultural imports have come under greater restrictions than before. Such items as tomato paste, rice, and tobacco can be imported only by a special permit. In 1968, agricultural imports valued at \$44 million made up only 8 percent of total imports of \$541 million. Major farm imports included milk and cream (\$10 million), wheat (\$9.7 million), and sugar (\$4.2 million). Lesser values were recorded for fruits and vegetables, jute, malt, essential oils, and unmanufactured tobacco.

The chief American farm exports to Nigeria in 1968 were wheat valued at \$7.2 million, dairy products worth \$3.5 million, and unmanufactured tobacco (\$877,000). Nigeria was the United States' 50th largest customer for farm products.

On the return trip to the United States, freighters in 1968 carried Nigerian farm products with a total value of \$25 million. Of this total, cocoa beans were worth \$17 million; rubber was valued at \$3.0 million; hides and skins, \$2.3 million; and oils and oilbearing materials, \$1.4 million. Nigeria is America's 44th largest source of supply for agricultural imports. (Snider W. Skinner)

RHODESIA

Agricultural Production

Increased agricultural production, which may have reached a value of \$280 million, helped Rhodesia's gross national product grow by 7 percent (real terms) in 1969. Good weather was largely responsible for the

increase in agricultural production. For some commodities Rhodesia produced more than needed for the domestic market and the export availability increased. Agriculture accounts for about one-fourth of the GNP and is by far the largest employer. It also provides many raw materials for industry, which has been growing rapidly since the unilateral declaration of independence (UDI) in 1965.

Although tobacco is still a leading crop, its importance has decreased since UDI. Production in 1969 was an estimated 62,000 tons, slightly higher than the 1968 crop. Tobacco trade data are not publicized and tobacco marketings are held in strict secrecy. There apparently is a large stockpile of tobacco, reported to be in excellent condition, and some Rhodesian tobacco is finding its way into the world market.

In December, the Minister of Agriculture announced the government production target for the next two tobacco seasons. The target will be 45,000 tons (100 million pounds) at a price of 32 cents U.S. (23 cents Rhodesian) per pound. This is a decrease in quantity from the current crop target; it is an increase in price. The new price and volume mean that growers may get at least \$5.6 million less than from the previous crop. Although the Rhodesian Tobacco Association has rejected this plan, the government appears to consider it necessary to reduce the amount it has been spending to support the tobacco industry.

Sugar is probably the second most important commercial crop adversely affected by sanctions. Current production is much lower than pre-UDI crops and much land has been diverted from sugar to citrus and wheat. Production of sugar in 1969 rose slightly over 1968 production to 136,000 tons. This would have availed about 40,000 tons for export.

Since 1965, production of most commercial crops other than tobacco and sugar has tended to increase. Production of all grains, commercial and subsistence, rose in 1969 due to the good weather and expanded acreage. The corn crop was record high and more than twice the 1968 harvest. Since 1969 production far exceeded domestic demand, corn was exported--about 500,000 tons of

white corn went to the Republic of South Africa.

Before UDI, annual wheat production was less than 4,000 tons. The combination of expanded acreage and good weather resulted in a 1969 wheat crop of 27,000 tons. Production is expected to continue upward in the 1970's. Three-fifths of the crop is grown under irrigation in the lowveld where acreage is continuing to increase. Although Rhodesia is still an importer of wheat, about 90,000 tons in 1968, it plans to become self-sufficient.

Rhodesia's 1969 commercial peanut crop was about 37,000 tons, much higher than 1968 output. Production appears adequate to meet domestic needs. Peanuts are the leading cash crop for black farmers. Prior to UDI they were the most important producers. However, recently white farmers have increased their production, especially under irrigation, and are now the leading commercial producers. Peanut acreage for the 1970 crop has been increased, so a larger crop can be expected.

Cotton is a very important diversification crop; production has increased rapidly since 1965 and probably reached 45,000 tons in 1969. About 85 percent of the crop is grown by white farmers on irrigated land. Since this large crop exceeds the country's ginning capacity, some probably was exported. Although it is believed that cotton production will continue to increase, the rate of growth may slow down somewhat.

Agricultural Policy

With the creation of the Agricultural Development Corporation (ADC), the Agricultural Finance Corporation (AFC), the Agricultural Research Council (ARC), and the Agricultural Marketing Authority (AMA), the government's reorganization plan for agriculture has been completed. These now constitute the four pillars of the agricultural industry. The reorganization began 2 years ago with the establishment of the AMA to coordinate the operations of the three main marketing boards. A year later the ARC was set up to coordinate work of the many independent research groups. The last two were formed in 1969--the ADC to establish planning priorities and the AFC to coordinate

credit facilities available to the agricultural community.

More recently, the government established several organizations to promote development of the tribal areas. It is encouraging the formation of local councils to carry out community development projects. These projects include building roads, dams, classrooms, and developing demonstration plots and irrigation schemes. After nearly a year of little action, the government-sponsored Tribal Trust Land Development Corporation has announced the first phase of a development project for the Seki reserve, near Salisbury. Also a Tribal Areas of Rhodesia Research Foundation has been set up to raise funds for research on economic development in the tribal areas.

These are just some of the efforts being made to change the traditional economy to a commercial one. However, since the black population (approaching 5 million) is doubling about every 20 years, the change and growth necessary to support this size population is substantial.

Foreign Trade

Except for totals, Rhodesian trade data have not been published since 1965. For 1969, total exports are estimated at \$320 million, about 70 percent of pre-UDI exports. Rhodesia reported a favorable balance of trade. It appears that both exports and imports were higher in 1969 than in 1968.

Larger crops probably contributed to larger agricultural exports in 1969. Corn exports were higher than usual; South Africa alone purchased at least 500,000 tons of corn. South Africa also purchased cotton from Rhodesia. Tobacco and sugar, major exports prior to 1965, are still being exported, though in greatly reduced amounts. Mineral exports appear to be growing rapidly.

As far as can be determined, Rhodesia imports relatively few agricultural commodities. The more important of these are believed to be wheat and rice. However, Rhodesian production of these is increasing, so future imports should be smaller. At present South Africa appears to be

Rhodesia's major supplier. (Mary T. Chambliss)

SENEGAL

The outlook for 1970 is for recovery of the Senegalese economy. Senegal's economic situation, which depends in large part on farm production, was depressed during 1969 because of the drought-affected 1968 agricultural harvest. After reaching a high of \$718 million in 1968, the gross national product for 1969 is thought to have been somewhat lower. Per capita GNP in 1968 was about \$220. In 1969 farm production recovered from the previous year's low, and in 1970 GNP should again move upward to maintain the 10-year 5.5 percent average growth rate.

Agricultural Production

The 1969 growing season was a normal one and production returned to near average levels after 1968 drought. Output might have been larger except that fertilizer use dropped significantly as farmers reacted negatively to reduced incomes from 1968 crops and purchased much less commercial fertilizer than expected.

The index of agricultural production in 1969 was 138 (1957-59 = 100), up 22 points from 1968. Per capita food production was 106 compared with 91 for the previous year. The 1969 peanut harvest was estimated at 885,000 tons, 72,000 tons larger than the previous year's crop. Generally the trend in Senegalese peanut production has been downward since crops of 1.0 and 1.2 million tons were harvested in 1964 and in 1965. Peanut area was reduced an estimated 10 percent for 1969, to 900,000 hectares. Fertilizer consumption totaled 13,000 tons during 1969 as against an anticipated demand of 30,000 tons. Offsetting these negative factors was the considerable improvement in weather. The outlook for the Senegalese peanut industry is not encouraging. The world market for fats and oils has several important negative aspects, including the large supply of U.S. soybeans and palm products in other developing countries. There is little prospect for an increase in peanut oil prices in the next year. The important guaranteed market in France for Senegalese peanuts no longer exists. Common

Market discussions on fats and oils policy spells increased marketing problems for Senegalese peanuts.

An estimated 650,000 tons of millet and sorghum, the staples of the Senegalese diet, were harvested in 1969. This tonnage should be sufficient to meet domestic needs throughout the next year. During the pre-harvest period of 1969, large quantities of sorghum, corn and other grains for food had to be imported to prevent widespread starvation.

Rice production in 1969 at 140,000 tons is believed to have surpassed the previous record-high level experienced in 1967. But Senegal will be short of this basic foodstuff in 1970 and imports will be required for several years despite extensive rice development programs. The USAID rice project (in cooperation with the Taiwanese) in the Casamance area shows promise in expanding rice output. About two-thirds of Senegal's total rice consumption is imported.

Cotton production is gradually increasing. The 1969 crop is estimated at 12,000 tons of unginned cotton. With assistance being given by the French Textile Fiber Development Company and the European Development Fund, Senegal expects to produce 25,000 tons of unginned cotton (8,000 tons cotton lint) annually by 1971/72. This indicates that cotton imports will decrease over the next few years as domestic production supplies more of local requirements.

Agricultural Policy

The third Senegalese Development Plan became operational July 1, 1969, with major emphasis on agricultural production. The plan is an effort to lessen the economy's dependence on peanuts and to reduce the present level of food imports which are mainly rice, sugar, vegetables, milk and fruit. Irrigation facilities will be greatly expanded to extend Senegal's agriculture into presently unproductive areas. Emphasis will also be placed on farm enlargement and mechanization. The plan also emphasizes fisheries, and the hope is to build a larger export market for fish products. Total investment is to be \$46.8 million over a 4-year period. One-third of the investment is to be from domestic sources,

and two-thirds will be obtained from external sources.

Foreign Trade

Despite an increase of 10 percent in exports in 1968, Senegal's trade position worsened owing to a rise of 15 percent in imports. The largest category of imports, comprising food, beverages, and tobacco, amounted to \$65.6 million out of total imports valued at \$180.2 million. The largest single commodity import was rice--185,000 tons valued at \$28.3 million compared with 153,000 tons in 1967. France was the main source of imports, supplying 44 percent of the total. Other sources were Germany, Cambodia, the United States, the Republic of China, and Italy, in that order.

The volume of exports increased more than their value, owing to lower prices for peanut products. Total exports for 1968 were valued at \$151.4 million. Exports of peanut oil increased from 162,000 tons in 1967 to 198,000 tons in 1968, but the value of these exports fell from \$58.3 million to \$43.8 million. Shelled peanuts worth \$33.2 million and peanut cake worth \$21.9 million were exported in 1968. Peanuts and peanut products as a percentage of total exports decreased from 78 percent to 72 percent between 1967 and 1968. There were increased exports of other products processed or manufactured locally such as fertilizer, wheat flour, shoes, and cotton textiles, an indication of the effort directed toward diversification of the Senegalese economy. (Margaret B. Missiaen)

SIERRA LEONE

Improvement in Sierra Leone's economic condition began in 1968 and continued throughout 1969. Most of the credit for the brighter economic picture must be given to the nonagricultural sector. However, some improvement occurred in the agricultural sector, especially the financial recovery of the Sierra Leone Produce Marketing Board (SLPMB).

In 1968 Sierra Leone had a favorable trade balance. During the first half of 1969 exports showed a satisfactory increase but imports showed an even bigger increase. Thus, only a slight surplus was expected for

the full year 1969. Because of the country's limited industrial potential and the absence of import controls, increased purchasing power was reflected very quickly in the form of increased imports. Thus, some deterioration in the country's balance of payments can be expected in 1970.

Today's improved financial situation is due to the deflationary policies put into effect by the previous military regime and continued by the present civilian government. The present government is determined to continue strict controls over expenditures. It is also seeking to avoid uneconomic projects and to maximize the use of local resources. This policy, however, leads to difficulties--a slow rate of economic growth (currently 3 percent), rising unemployment, substantial price inflation, and some worsening in income distribution. There are also some problems associated with increased urbanization.

Considerable improvement has occurred in agriculture, although this sector did not fulfill its export potential. The prospect of finding "illegal" diamonds continues to attract large numbers of the most able farm people. The diamond fields have not lost their lure in the years since Sierra Leone's diamond rush began in 1954.

Agricultural Production

By increasing a little more than 2 percent, agricultural production in 1969 reached 123 percent of the 1957-59 base.

Palm kernel purchases by the SLPMB between January and August 1969 totaled 36,407 tons, an increase of 6 percent over the same period in 1968. Because producer prices had been raised, an even larger increase had been anticipated but many up-country roads and bridges were flooded by heavy rains, causing disruptions in palm kernel transport.

Heavy rains in June-August 1969 (the cocoa flowering period) caused an increase in black pod disease. In consequence, the 1969/70 cocoa bean crop is estimated at 3,000 tons, about 70 percent of the previous year's crop. Since world cocoa prices are high, SLPMB's will likely continue profitable.

Sierra Leone is a major world producer of piassava (palm fiber), used in making street brooms, scrub brushes, and the like. In 1968, many piassava producers boiled their crop, sometimes with caustic soda, to speed up the retting process. As a result, offerings to SLPMB were poor in quality. The piassava situation became so bad in early 1969 that the government took the unusual step of closing the buying season. In August 1969, piassava was removed from SLPMB's buying schedule and exporting was turned over to private firms. Government produce inspectors were instructed to be stricter about piassava quality. As 1969 ended, it was anticipated that the quantity and proportion of prime grade piassava produced would return to normal by the end of 1970 or 1971.

Sierra Leone's 1969/70 coffee crop was estimated at 5,400 tons (90,000 bags), slightly less than the 1968/69 crop of 5,700 tons (95,000 bags). The downturn was attributed to the normal cyclical pattern of tree yields and because the heavy mid-1969 rains did some damage to coffee blossoms. In 1968/69, domestic production was thought to have been substantially inflated by an inflow of coffee from neighboring countries, particularly Guinea. Purchases by SLPMB far exceeded Sierra Leone's Annex A quota under the International Coffee Agreement and coffee stocks piled up, causing a strain on Board finances and storage space.

Sierra Leone continues to grow more tobacco than can be manufactured at the cigarette factory at Wellington. Efforts are being made to find export markets, but low quality of the leaf and the high overhead costs of growing and exporting make profitable overseas sales difficult.

Efforts to increase production of rice, Sierra Leone's staple food, have made slow but steady progress over the years. These efforts received a slight setback in 1969 when heavy rains during the growing season caused flooding in the upland production areas and in mechanically-prepared areas of the south. Reduced harvests in these areas were partly offset by higher yields in the bolilands which benefited from the heavy rainfall.

In 1969, production of other food crops --including peanuts, yams, corn, guinea

corn (grain sorghum), citrus fruit, pineapples, and bananas--was at or above the 1968 levels.

Agricultural Inputs

Fertilizer consumption, an indicator of agricultural development, likely totaled 1,500 tons in 1969, up about 400 tons over 1968. About 75 percent was phosphate for use on boliland and swamp rice fields. Fertilizer consumption has more than doubled in 2 years.

There has also been some increase in the area under irrigation by water control methods recommended by Taiwanese technicians for use on inland swamp rice and vegetable farms. These methods increase both yields and length of growing season.

Foreign Trade

Sierra Leone's foreign trade picture in 1968 was rather bright, considering that exports improved considerably, almost matching imports. Each was valued at almost \$91 million. This contrasts with a 1967 unfavorable trade balance of about \$27 million.

Agricultural exports in 1968 consisted mainly of palm kernels valued at \$8.6 million, coffee at \$3.8 million, cocoa beans \$2.8 million, piassava \$1.1 million, ginger \$398,000, and kola nuts \$235,000.

Nonagricultural exports--particularly diamonds (\$55 million) and iron ore (\$13 million)--were much more valuable than farm exports.

In 1968, the United Kingdom was by far Sierra Leone's best customer, followed by the Netherlands and West Germany. Sierra Leone's largest suppliers were the United Kingdom, Japan, and the United States.

In 1969, the first shipment of 600 hundredweight of flour milled in Sierra Leone was exported to Gambia. Another trade first was the shipment of 26 tons of cassava chips to West Germany. (Snider W. Skinner)

REPUBLIC OF SOUTH AFRICA

The gross domestic product of South Africa reached \$16.4 billion in 1969. In

terms of 1958 prices, real growth was an estimated 6 percent; 1970's growth will likely be about the same. The agricultural sector accounted for about 8 percent of 1969's GDP.

Agricultural Production

Production of grains was mixed in 1969. Drought early in the year in the Maize Triangle caused corn production to fall to slightly less than 5 million tons. Prospects for the 1970 crop appear better than usual since early rains were excellent in the main corn growing area. However, rain in January and early February was spotty in other areas. The area planted to corn decreased this year but production should be high. March estimates of the 1970 corn crop range from 7.6 million tons to 9 million tons. The 1967 crop of 9.8 million tons was the largest on record.

Sorghum production in 1969 was slightly higher than the previous crop. Area planted for the 1970 crop is up from last year, and with an expected increase in yields, production will be higher. Sorghum is used primarily as a brewing ingredient for "Bantu" beer, consumption of which is increasing.

The 1969 wheat crop was a record 1.3 million tons. Production in 1970 is expected to prove slightly higher. Although the Cape wheat area suffered from drought, production in the Orange Free State and the Transvaal was so exceptional that the overall crop was excellent. Wheat consumption is continuing upward due to population growth.

Fruit production last year was generally lower than in 1968. Most of this decrease was due to adverse weather; a virus infestation among apricot trees also affected production. The pear harvest, falling to 73,000 tons, was adversely affected by hailstorms. The apple crop likely reached 216,000 tons, up 2 percent. Peach, apricot, and plum production decreased slightly. Total deciduous production for 1969 was an estimated 574,000 tons. Pineapple production fell about 6,000 tons to 130,000 tons. Production of oranges, the main citrus, was 517,000 tons, down from the record 1968 crop of 520,000 tons. Drought conditions in the southern part of the country early in 1970

appear to have affected this year's fruit crop.

South Africa is the world's seventh largest producer of sugar from cane. It is a member of the International Sugar Agreement and has a quota from the United States. Although South Africa's U.S. sugar quota is not large, there has been some pressure within the United States to decrease or remove it. Production of sugar in 1969 increased to nearly 1.6 million tons from 1.5 million the year before. Since the introduction of the new sugar agreement, prices have increased, and prospects for the South African sugar industry appear brighter than they have been for sometime. Domestic sales are also up. During recent years, South Africa has followed an expansion program for sugar production. However, with acceptance of the new international agreement, no increase in production is being allowed at present.

Peanuts are the largest oilseed crop in the Republic, closely followed by sunflower seed. In 1969 the peanut crop (in shell) was 344,000 tons, the second largest crop on record. This was due to larger area planted, good rains during the end of February and March, and sunny weather at harvesttime. Local consumption used most of the crop, but some confectionary quality nuts, some oil-crushing nuts, and some peanut oil and cake were exported. It appears that a greater area was planted for the 1970 crop.

The general trend of cotton production in the sixties was upward. Although 1969 production fell slightly to 22,000 tons, this was much higher than production in the early sixties. Larger areas, both dryland and irrigated, are being planted and yields are increasing.

Wool is South Africa's most important agricultural export commodity; it accounts for about 5 percent of total exports. South Africa is the world's fifth largest producer of wool. In 1969 the clip was about 145,000 tons, 7,000 tons above the previous one. Prices during opening auctions of the 1969/70 season tended to be higher than during the same period a year earlier, but a little lower than prices at the end of May 1969.

Livestock numbers showed a general increase during 1969. Slaughtering of cattle and calves decreased, following a downward trend since 1965. The small stock and hog kill rose. Overall it appears meat production decreased slightly. Estimated per capita consumption of beef appears to be decreasing, probably because of higher retail prices. But consumption of mutton, pork, and poultry appears to be increasing. Poultry meat is now more important than pork for domestic consumption and will continue increasing its share of the market.

Agricultural Policy

South African authorities continued their policy of maintaining agricultural production by supporting measures to stabilize prices to producers. This policy is carried out mainly by various marketing boards. A joint marketing board for all canning fruit might come into effect this year. The proposed new board would control the marketing of all apricots, peaches, pears, and pineapple intended for canning. A control board for cotton has also been proposed. It would be used for (1) price arrangements, (2) grading and standardization, (3) effective distribution of the crop, and (4) market promotion.

In June 1969, the Minister of Agriculture announced a stock-reduction scheme for sheep grazing areas to stabilize the veld, where deterioration and soil losses have reached alarming proportions.

In 1968 the third revision of South Africa's Economic Development Program concluded that an annual average growth rate of 5.5 percent should be realized for the period 1968-73. So far, estimated growth exceeds this rate. To meet the increased labor demand expected, especially of skilled workers, net immigration of at least 30,000 per year is considered necessary. Priority will also have to be given to training local manpower. The largest contributors to programmed economic expansion will be manufacturing and, to a lesser extent, services. The percentage contribution of mining industries and agriculture will decline, though the absolute value may rise.

Within the general policy of economic growth, the South African government has a

policy of economic development in the black population areas. One of the largest of these is the Transkei, where the Xhosa Development Corporation has been formed. The Transkei has just suffered a 6-year drought which had very adverse effects on crops and cattle. As a result, special efforts are being made to improve farming practices and build as many water catchment basins as possible. An example of this effort is the tractor program. The program appears successful, but limited by the relatively small number of machines.

Foreign Trade

During 1969 South Africa's trade deficit was \$836 million, larger than in 1968. This gap reflects trade in goods and services; it does not include trade in gold. The Republic's imports during 1969 were valued at \$2,995 million; exports were worth \$2,159 million. Imports increased by \$364 million; exports, by only \$44 million. Europe remained South Africa's major trading partner, both in buying and supplying; however, trade with Asia is increasing rapidly. South Africa is the United States' largest commercial market in Africa. The U.S. share of the South African market, which fell slightly in 1969, is about 17 percent.

Agricultural exports from South Africa declined in 1969. Most of the decrease was due to the small corn exports. Corn exports were discontinued temporarily in early March 1969. During the rest of 1969 South Africa imported at least 500,000 tons of white corn from Rhodesia. Upon completion of arrangements to import this white corn which would satisfy the local market, South Africa cleared exports of some 180,000 tons of corn (mostly yellow) late in the year. Barring unfavorable late-season crop developments, South Africa should export substantial amounts--possibly as much as 3 million tons--of corn during the 1970-71 marketing season mostly to Japan, the United Kingdom, and Europe.

Exports of other agricultural products in 1969 appeared mixed. Some fresh fruit exports, such as apples, increased slightly; others, such as pears, decreased. Canned pineapple exports decreased; but exports of

canned peaches were estimated to have continued their upward trend. Citrus exports decreased slightly; sales to Europe fell by 8 percent. Sales of lemons and grapefruit increased in the United Kingdom, but not enough to offset other decreases.

Increased amounts of wool were available for export last year. France, the United Kingdom, Japan, and Germany are the largest importers of South African wool. Exports of karakul pelts were smaller in 1969.

South Africa is a net importer of cotton, but imports have been gradually decreasing in recent years. Imports were about \$14 million last year. The United States and Brazil are major suppliers. Recently, Brazil's share of the market has increased, while the U.S. share has decreased. This is mainly due to lower Brazilian cotton prices. South Africa does export some cotton, mostly of a type not needed by local textile mills.

Although South Africa exports some meat, primarily special cuts to adjoining countries, it imports much larger quantities. Most of the shipments from Namibia (South West Africa) and Swaziland--are on the hoof, but no beef comes in on the hoof from either Rhodesia or Botswana. This makes South Africa a large net importer of beef and veal; a small net importer of mutton, lamb, and goat; and a small net exporter of pork.

The largest agricultural imports in the past have been wheat, rice, and cotton. South Africa's self-sufficiency efforts in wheat production have greatly reduced wheat imports. Only 11,000 tons were imported in 1969. Ten thousand tons came from Lesotho and Swaziland and a thousand tons from Europe. The United States sold no wheat to the Republic last year and it is unlikely this will change in 1970. The United States does continue to be the major supplier of rice. The U.S. dock strike in 1969 reduced U.S. rice exports, but in 1970, rice exports should be back at the 70-80,000 ton level. (Mary T. Chambliss)

SUDAN

The economy entered 1970 with rising prices for both domestic and imported goods,

dwindling foreign exchange reserves, and continuing trade deficits. Price-control measures adopted in 1969 have not taken effect. And businessmen state that they are increasingly feeling the adverse economic impact of the Suez Canal closure.

Agriculture accounts for over half the country's gross national product estimated at \$1.54 billion in 1969 for a per capita GNP of \$102. There are an estimated 15.2 million Sudanese (mid-1969) of which 77 percent live in rural communities. Eighty percent of the 6.4-million-member labor force is employed in agriculture.

Agricultural Production

Largely because of an excellent cotton crop, agricultural production showed a moderate increase in 1969 to an index of 156 (1957-59 = 100). The cotton crop was 240,000 tons of lint, an increase of 11,000 tons over the good crop of 1968.

Sudanese grain production was estimated at 1.5 million tons, up 16 percent over the 1968 harvest. Durra, a grain sorghum, accounts for two-thirds of all grains produced. The 1969 sorghum harvest probably reached 1.0 million tons, up 200,000 tons over the poor 1968 crop, but far below production in good years.

Inadequate sorghum supplies plague government officials. Exports were banned in 1969 and drastic measures are promised to stop smuggling. In efforts to control rising prices, the government has made overtures to purchase 250,000 tons of grain.

Agricultural Policy

In 1969, Sudan fell to a military coup d'etat. As a result, most agricultural and trade policies are still in the formative stage.

West European countries have traditionally supplied most of Sudan's imports. A change in import policy for 1969/70 favors those countries with which the Sudan has barter, loan, and trade-payment agreements. That means priority is being given to imports from the United Arab Republic, India, East Germany, Poland, Czechoslovakia, Hungary, USSR, Yugoslavia, and Bulgaria. The 1969/70 import budget has been set at \$230

million with imports from West European countries restricted to the value of cotton they import from the Sudan.

Cotton exporters have been offered a bonus to maintain cotton exports at a high level for 1969. Cotton annually accounts for 50 to 75 percent of Sudan's annual export earnings.

The Ministry of Agriculture has dissolved the boards directing the Mechanized Farming, Public Agricultural Production, and Agricultural Research Corporations. These will be reorganized along with all other government-sponsored independent corporations after the Council of Ministers resolves policy differences. In another move, the new government has authorized the Gum Arabic Company Ltd. to sell \$3.4 million worth of stock. The government will retain 30 percent of the million shares to be issued and the firm's board of directors, composed of 100 of the leading exporters, will have veto power over prospective applicants for stock.

In September 1969, relations with the Egyptians were strengthened with a technical assistance agreement. Under it the United Arab Republic will help Sudan develop irrigation in the Sudd area of the Upper Nile Province.

Foreign Trade

Virtually all the Sudan's exports are agricultural produce. Cotton and gum arabic lead the list by value. Other commodities include peanuts, sorghum, sesame, live animals, and hides and skins. Exports in 1968 were estimated at \$233 million and imports at \$258 million. The United Kingdom, India, Japan and Russia were the leading suppliers while West Germany, Italy, India, and Japan were the leading markets for exports. Seventeen percent of Sudan's 1968 imports by value were wheat and flour, sugar, coffee, tea, and other food products. (William F. Hall)

TANZANIA

Agriculture is the most important sector in Tanzania's economy and the mainstay of its economic growth. Although agriculture's contribution to the gross national

product declined during the 1960's from near two-thirds to a little more than a half, much of the country's foreign exchange comes from cash crops. Therefore, agriculture can be expected to maintain a very important place in the economy.

Tanzania's economy has also been bolstered by a steady inflow of foreign aid which will likely continue for several years, at least while projects are being completed. The United States is building a highway, Italy has been laying a pipeline, and the People's Republic of China is starting to build a rail line that will link up Zambia's copper yields with Tanzania's ports.

Agricultural Production

Since 1966, agricultural outturn has more or less leveled off. The major grain crops--millet and sorghum, and corn--produced well in 1969. Cloves produced well in 1968 by yielding 14,000 tons, then dropped to an estimated 4,000 tons in 1969. The coffee crop, better than average in 1968 at some 55,000 tons, fell to 48,000 tons in 1969. Registering the largest decline of a major crop, production of sisal dropped from 220,000 tons to 200,000 tons, continuing its downtrend. After a bad year in 1968, cotton production last year was back up to 1965-67 average--71,000 tons.

Livestock production, considered to have great potential for development, has more or less kept pace with the needs of the growing population. Most of Tanzania's livestock products are used domestically. In 1968, only about \$6.3 million worth of meat were exported, plus small quantities of wool and hides and skins.

Agricultural Policy

Because of government encouragement, production of cash crops will soon be greater than production of those used domestically for subsistence crops. The government has established a number of statutory authorities which supervise, control and/or handle various functions of the management and marketing process. Many agricultural products are under the direction of government-created cooperatives and marketing boards. The policies and operations of the various boards, however, are by no means

uniform. Some of the more recently established boards assume advisory and management functions, but nearly all handle the pricing and the final sale of crops. As with other functions, the pricing policies of the boards also vary. Some maintain funds for price stabilization and assistance while others announce a set price to be paid before the crop is harvested.

Cooperatives have expanded rapidly to assist with inputs, extend credit, and provide other services; an increasing number are carrying on some retail trade activities (the company store role).

To control imports, Tanzania is promoting a policy of self-reliance through import restraints aimed at consumers. This program calls for import substitution with locally produced and processed items.

Tanzania, Kenya, and Uganda form a regional common market. They maintain a common external tariff and a common customs administration.

Tanzania's agriculture will likely continue its present gradual upward trend; diversification will help. More of agriculture's produce will be marketed through boards, and cooperative societies are being directed to step up retail selling to farmers. Already an announced policy, additional attention will be focused on livestock production through breeding and feeding programs and improvements in forage. Growth in other sectors will also have a favorable effect on the farming sector.

Foreign Trade

Tanzania's total exports in 1968 amounted to about \$240.5 million. Agricultural exports accounted for over 73 percent of the total. Cotton, coffee, sisal, cashews, and cloves were the leading items exported. The United States ranked sixth as an importer of Tanzania's products and most of the U.S. purchases were agricultural items; coffee and pyrethrum led the list.

Imports in 1968 totaled some \$256.7 million, of which about 11.8 percent were agricultural items. Cereals and cereal preparations and dairy products were the main items purchased, but smaller quantities of many other food items were imported. In 1968

the United States supplied Tanzania with American farm products valued at just over \$1 million. (H. Charles Treakle)

TUNISIA

Tunisian agricultural production declined in 1969, reflecting poor growing conditions. Drought struck early in the year and the September-October rainfall was the heaviest in centuries. Practically all annual crops had been harvested at flooding, but tree crops--particularly olives and dates--were damaged by the heavy rains. The floods did serious damage to other sectors of the Tunisian economy. During the first part of the year some economic progress was being made. Foreign trade and overall production were trending upward. The floods caused the loss of several hundred lives, drowned a large number of livestock, wiped out major roads and rail lines, and undid years of work in many areas where intensive irrigation projects had been undertaken. Exports of phosphate rock, one of Tunisia's major resources, were cut back drastically. It is hoped that, in the long run, the increased ground water supplies will have a beneficial effect on agricultural output.

Agricultural Production

Continuing drought conditions early last year were reflected in slight to considerable reductions in the 1969 harvest of principal crops. The index of agricultural production fell 15 points in 1969 to 78 (1957-59 = 100). Total wheat production was estimated at 350,000 tons (80,000 tons soft wheat and 270,000 tons durum) from about 640,000 hectares (1.6 million acres), down 33,000 tons from the previous year. Barley production, at 70,000 tons, was nearly one-third below the 1968 harvest of 100,000 tons. Government support prices to producers for the 1969 crop were \$83 per ton for soft wheat, \$92 per ton for durum, and \$54 per ton for barley.

Although harvesting of 1969 grain and pulse crops was completed prior to the rains and floods, planting of the 1970 grain crops was delayed in some areas because of the wet fields. Helicopters were used on a limited scale for seeding wheat in some of the wettest areas. Planting delays could be offset

by the advantages of ample soil moisture; the 1970 harvest outlook is generally optimistic.

The current olive crop suffered from the effects of prolonged drought. Later, the excessive rains damaged the ripening olives and in some cases destroyed olive trees. In addition, it was an off year in the olive production cycle. The 1969 crop was estimated at only 125,000 tons with an expected oil yield of 27,000 tons--down sharply from 275,000 tons of olives and 55,000 tons of extract in 1968. Trade sources believe that with current soil moisture conditions the 1970 olive crop could exceed 500,000 tons with an oil yield of up to 110,000 tons. The area under olive production is estimated at 985,000 hectares (2.4 million acres) with around 35 million producing trees. The government's program to plant new areas to olive trees continued in 1969.

The total 1969/70 citrus crop is forecast at 72,000 tons--down about 5,000 tons from the preceding season. Scale has affected a good deal of the crop, reducing its quality.

Livestock losses resulting from the recent floods probably were 15,000 to 20,000 head, mostly sheep and goats. However, the loss of animals has been offset by greatly improved grazing conditions as a result of sufficient soil moisture. Overall, the condition of livestock in early 1970 was excellent. The improved grazing and forage conditions should lead to increases in livestock numbers.

Agricultural Policy

Tunisia's agricultural cooperative (collective) movement, which involved about 2.4 million hectares (6 million acres) at its peak was scheduled to encompass its agricultural sector by the end of 1969. The movement was stopped as a result of continued and widespread dissatisfaction by agricultural producers and trade groups. Currently, the records of existing cooperatives are being examined to determine which holdings will be returned to private ownership. The agricultural law of September 20, 1969, set forth certain categories that would revert immediately to the private sector--all fruit and vegetable production and production

from irrigated land. Initially, cooperatives existing as of January 1, 1969, could continue to function. However, the current evaluation reaches all cooperatives and only viable units and those units with member support probably will continue. It is too early to determine how much land has actually been returned to the private sector, or how much is likely to be returned before the government completes its evaluation. Despite current short-term uncertainties over the responsibilities and functions of the various sectors involved, support for the current policy is enthusiastic throughout the country. This may lead to subsequent gains in overall agricultural production and improvements in marketing practices.

Foreign Trade

The value of Tunisia's total exports for 1968 was \$157 million, up \$8 million from 1967. Agriculture's export share of the total remained at about one-third. Some 33,000 tons of olive oil worth \$22.5 million were exported, mainly to France, Russia, Libya, and Italy. Next in agricultural export value came fruits and vegetables valued at \$12.6 million, with citrus contributing \$3.1 million of this total. Wine exports of 68,000 tons were valued at \$6.8 million in 1968.

On a crop-year basis, exports of agricultural commodities are likely to be down during 1969/70. Exports of olive oil are not expected to exceed 15,000 tons during the current season, compared with 32,000 tons in 1968/69. Citrus exports were estimated at about 30,000 tons for 1968/69 and are forecast at about that level for the current marketing year. Approximately 80 percent of the 1968/69 citrus exports consisted of oranges.

Total imports during 1968 were valued at \$217.5 million with agricultural goods making up 26 percent of the total. Cereals valued at \$23.8 million were the main imports. Wheat and flour imports were worth \$20.5 million. The United States supplied almost 70 percent of these imports, largely under P.L. 480 agreements. Vegetable oils worth \$6.2 million (also provided largely under P.L. 480), sugar worth \$5.5 million, and dairy products worth \$4.9 million were also imported. Forecasts indicate that

Tunisia will need to import up to 430,000 tons of wheat and 80,000 tons of barley during 1969/70.

Official foreign trade figures put Tunisia's trade deficit for the first 9 months of 1969 at \$60 million, nearly 18 percent more than last year's imbalance for the same period. Tunisia's exports cover only 67.2 percent of its imports. Its balance of trade was more unfavorable at the end of the year because the floods temporarily cut off important phosphate exports.

An association agreement with the EC entered into force September 1, 1969. It allows Tunisian industrial products to enter the Common Market duty and quota free. Tunisia's citrus will bear only a 4 percent duty instead of the common external tariff of 20 percent; however, this provision means that duty-free entry privileges on the French market were replaced by the 4 percent duty. Tunisian olive oil will benefit from a \$50 per ton conditional preference if the minimum price is observed. (Margaret B. Missiaen)

UGANDA

Uganda's agricultural progress during 1969 was moderately upward for all major crops except coffee. That deviation was enough to lower the index of agricultural production to 130 percent of 1957-59 base--slightly below the index for 1968, when Uganda had a record coffee crop.

Prospective price gains for cotton and coffee--Uganda's two most important export crops--should improve export revenues in 1970. This favorable outlook contrasts sharply with the 1969 picture, which was clouded by political turmoil.

Agricultural Production

Minor production gains were recorded in 1969 for such subsistence crops as millet, sorghum, corn, pulses, cassava, sweet-potatoes and plantains. The corn crop totaled 325,000 tons, up 5,000 tons from 1968. Raw sugar production was record high at 159,000 tons. Fruit and vegetables produced good harvests.

Tea production was at a record level, but the coffee harvest of 165,000 tons was

well below the 189,000-ton output of 1968. For coffee this was considered a return to near-average production after a bumper crop. The government enacted two significant coffee marketing changes in October 1969. Beginning with the 1969/70 International Coffee Agreement year, the Coffee Marketing Board will be the only exporter of Uganda coffee. And cooperatives will have a monopoly in buying from the farmers, pulping, and selling to the board all coffee except washed robustas.

Cotton production was unchanged from 1968.

Agricultural Policy

In October, on Uganda's seventh anniversary of independence, President Obote announced a "common man's charter." Its purpose is to advance measures toward a more even distribution of the country's economic and social benefits. While the charter was not specific, it indicated a move to consolidate many of Uganda's small farms into larger, more economic units. Just what changes will result from the new charter cannot be projected.

Recently, however, the Ministry of Agriculture and Forestry confirmed that its future policy would be one of discouraging fragmentation and encouraging consolidation and enclosure. It was distributing more educational materials and stepping up its attempts to improve and diversify the agricultural sector and to expand conservation.

Uganda has joined other major tea exporting countries who have adopted the "Mauritius export restriction plan." Under it, tea exports are limited during 1970 in an attempt to rescue falling tea prices and keep the world market price at or near the 1968 level. This will probably not seriously reduce Uganda's tea exports as the quota for Uganda is not stringent.

Kenya, Tanzania, and Uganda form a regional common market and they maintain a common external tariff and customs administration.

Foreign Trade

Uganda's total exports in 1968 amounted to \$213.2 million. By value, 82 percent of them were agricultural, including coffee

(57 percent), cotton (about 24 percent), tea (6 percent), and the balance a variety of livestock and crop items. The United States is Uganda's number one overseas market. U.S. purchases in 1969--virtually all of agricultural items--were valued at \$45.9 million.

Uganda's 1968 imports totaled \$162.2 million, and only 7.2 percent were agricultural items. Cereals, fruit, and vegetables were the principal items purchased. The United States ranked sixth as a source of imports, but supplied only a very small portion of Uganda's agricultural imports. (H. Charles Treakle)

UNITED ARAB REPUBLIC

Despite the severe difficulties stemming from the Middle East war of 1967 and its aftermath, economic activities in the United Arab Republic showed signs of improvement in 1969. Indications are that total agricultural production reached a record high. Substantial gains were reported for cotton and all major grain crops. The gains coupled with greater industrial production, particularly in the oil sector, might well mean that GNP growth in 1969 exceeded the annual rate of 5.5 percent in recent years.

The United Arab Republic had a trade deficit of \$465 million in 1965. By the close of calendar 1968, this imbalance had been reduced to \$44.3 million. Moreover, preliminary data for the first three quarters of 1969 suggest that the reduction has continued. Loss of foreign exchange earnings from reduced tourism and continued closure of the Suez Canal has been partly offset by greater economic assistance from Eastern Europe and neighboring Arab countries.

Agricultural Production

Agricultural production in the United Arab Republic continued on an upward trend for the third consecutive year in 1969. The index of agricultural output rose to 122 percent of the 1957-59 base, up 7 points from the 1968 level. The increase was enough to reverse the downtrend since 1962 in agricultural production on a per capita basis.

Reports indicate that cotton area in 1969 approached 770,000 hectares (1.9 million acres), slightly over 10 percent above a year earlier. Higher yields combined with a larger area boosted output to 511,000 tons, up 17 percent above from the 1968 harvest. Some of this increase was attributed to favorable growing conditions. More important were renewed efforts by the government to expand the cotton area and to improve quality and yields by the use of price incentives.

More water was available for rice production. Early estimates place the rice harvest at over 2.5 million tons. This estimate was a bit optimistic. It now appears that 1969 rice production exceeded the 1968 crop of 2.35 million tons by about 90,000 tons. Lesser gains were indicated for the other major grains. Cotton and rice probably had the largest area increases of all crops planted.

A higher output of cottonseed was associated with greater cotton production for 1969. Slightly larger crops of other oilseeds were expected. Increased area and production were indicated for onions, the third ranking export crop. Improvements also were estimated for sugar, citrus, and vegetables.

Little change was reported for the livestock industry. Production of livestock products in the UAR remains insufficient for the domestic market even though per capita consumption of meat and milk is low. Increased reliance must be placed upon imports to meet local needs.

Agricultural Policy

Renewed emphasis was given to programs designed to promote basic structural changes in the economy. Redistribution of agricultural holdings was continued along with efforts to consolidate small units and fragmented holdings. Cooperatives assumed more activities previously carried out by private intermediaries in the agricultural sector. The process of extending state ownership and control in other parts of the economy was continued with the result that almost all large-scale enterprises are now a part of the public domain.

The government relied increasingly upon fiscal policies to reduce inflationary pressures and improve the country's balance-of-payments position. Foreign exchange regulations were revised to reduce imports and to limit them solely to essential items. New price measures were adopted in hopes of stabilizing consumer prices, greater efforts were made to keep wages in line with productivity, and more crops came under the government's guaranteed price program. These measures, along with increased efforts to expand exports, appeared to strengthen the economy as the year progressed.

Foreign Trade

Data for calendar 1968 suggest that total exports were valued at \$621.7 million; imports were valued at \$666.0 million. This represented a 10-percent increase in the value of exports from the preceding year and a 17-percent decline in imports.

According to reports by the Egyptian Ministry of Economy, exports of agricultural products rose \$7 million during the first three quarters of 1969 over the corresponding period a year earlier. Increases were reported for rice, citrus, onions, potatoes, peanuts and garlic. Additional export gains in these commodities are forecast for 1970.

Cotton exports declined. During the crop year ended August 31, 1969, they amounted to 246,300 tons against 271,720 tons in the preceding year. The leading buyers by importance were the USSR, Japan, India, Italy, Czechoslovakia, West Germany, Spain, and France. An increasing percentage of total cotton production is being processed by the local textile industry; larger supplies of textiles are exported. Even so, raw cotton exports probably picked up during the current marketing year because of the large 1969 crop.

While the UAR will have larger supplies of its usual farm products available for

export, it must import large quantities of food. Wheat and wheat flour deficits for 1970 are likely to approach 2.5 million tons. There will be a need for close to 150,000 tons of animal fats and vegetable oils, plus small quantities of feed grains, dairy products, and tobacco.

Near the end of calendar 1969 the UAR agreed to purchase 600,000 tons of wheat and 50,000 tons of flour from Italy for delivery before June 30, 1970. Earlier contracts were signed with France for 900,000 tons of wheat. In recent years Russia and Spain have shipped wheat and flour to the UAR. Moreover, there are reports that discussions underway could lead to sizable purchases from Canada.

Aside from small amounts of tallow, tobacco, vegetable oils and miscellaneous items, the UAR has been an insignificant dollar market for U.S. agriculture during the past few years. Incomplete data for 1969 suggest U.S. trade with the UAR declined for the fourth consecutive year. The value of these shipments plunged from \$137.8 million in 1966 to \$7.2 million for 1968, principally because of reduced U.S. shipments under P.L. 480. Total U.S. farm imports from the UAR have also declined in recent years and amounted to only \$6.1 million in 1968--all but 3 percent was accounted for by long-staple cotton.

Given a favorable political climate, the Egyptian economy will continue to grow and thus provide a larger market for selected farm commodities in the immediate future. Prospects of expanding the present small dollar market for U.S. farm products are not good; Egypt has few dollars and limited opportunity for earning more. The prevailing exchange-control system tends to conserve foreign exchange earned from hard-currency areas and to maintain balance with bilateral trade partners. (Cline J. Warren)

WEST ASIA

CYPRUS

Cyprus has just completed its first decade of independence. Cypriot agriculture during that time has made great strides. The index for total agricultural production (1957-59 = 100) stood at 209 in 1969, up 25 points from 1968. With population growing at a rate of less than 2 percent per year, the index of per capita agricultural production climbed to 185, up 95 points from 1960. Approximately 40 percent of the Cypriot population is involved in agriculture, forestry, and fishing. This has changed little in the last 10 years.

Agricultural Production

There was a vast improvement in the agricultural situation in 1969. A year earlier, the island's grain crops suffered severe damage from drought. Early and timely rainfall in December 1968 and early 1969 resulted in excellent crops of wheat and barley as well as good harvest of most other commodities. Record crops of grapes, olives and citrus were produced.

Wheat production for the 1969 season reached 85,000 tons, about 40 percent greater than in 1968. The barley crop at 105,000 tons was surpassed only by the excellent 1965 crop of 137,000 tons.

Total production of citrus for 1968/69 reached a record 177,000 tons. Of this crop, 144,000 tons went into export and 14,000 tons for processing. Oranges accounted for more than 50 percent of the total production. Production of Valencia type oranges has tripled since 1964, while the production of the Shamouti (Jaffa) variety has leveled off. There has been a continued increase in the production of grapefruit during the past few years. With the increasing acceptance of grapefruit in the European market, this trend will probably continue.

The government intends to increase livestock and meat production. This program, singled out for development during the first 5-year plan (1963-67), has met with success. The value of production rose by 33 percent. Improved slaughtering methods are being

encouraged, as well as mixed farming projects, to stimulate animal raising. The government wants to increase the raising of improved dual-purpose cattle. All this is being done in the hopes of making Cyprus self-sufficient in meat and of reducing outlays of foreign exchange for meat and other livestock products.

Foreign Trade

In 1968/69 the United Kingdom was Cyprus' most important citrus customer, taking almost 40 percent of the total exports. The EC countries were second with 25 percent, East European countries third with 24 percent, and other West European countries fourth with 8 percent.

Cypriot officials feel that the greatest increase of the citrus market will be in East Europe where per capita consumption is on the rise.

Despite the drought of 1968, agricultural exports contributed over 57 percent of the total value of goods exported. Citrus, potatoes, carobs, vine products, and carrots continued to find good markets abroad. (Michael E. Kurtzig)

IRAN

Iran's overall rate of growth has been exceptional, averaging about 10.5 percent over the past 4 years. The gross national product at current prices was estimated at over \$8 billion for the Iranian year that ended March 20, 1969. GNP per capita, which has been rising, was about \$300.

At the same time the cost of living has risen at a very low rate--less than 2 percent per year. But it has been less stable in recent years and is under increasing pressure.

Oil production, which has risen about 95 percent over the past 5 years, slowed a little in 1967 and 1968 but accelerated in 1969. This sector of the economy has contributed importantly to the overall economic growth. Non-oil industries and construction also have been increasing rapidly.

Agriculture, while it has not kept pace with the other sectors, has contributed. In recent years agricultural productivity has stepped up. This momentum is the result of government efforts and favorable weather. All crops contributed but most important was the sharp rise in wheat production from 1967 through 1969. Overall, farm production in 1969 was very close to the 1968 figure.

Agricultural Production

The production of wheat in 1969 was reported at 3.9 million tons, down 500,000 tons from the preceding year, but about the same as in 1967. The decrease in production was largely due to heavy rainfall during late fall and winter which delayed planting in most parts of Iran. This was followed by wheat rust that came after beneficial spring rain. About 4.6 million hectares (11.4 million acres) were harvested in 1969, down slightly from a year earlier. The area will be expanded in 1970.

The output of barley in 1969 was close to the 1.27 million tons turned out in 1968. Unfavorable weather at planting time reduced the area in barley.

Rice production increased primarily because of an expansion in acreage and better cultural practices. The 1969 crop was estimated at 1.05 million tons, slightly above the 1968 harvest.

Cotton showed a small increase in output in 1969 and was estimated at 152,000 tons, only 2,000 tons better than the 1968 crop. The increase came on an expanded area. Cotton production has been up since 1967, reflecting both good weather and success in controlling the bollworm. Iran uses about 52,000 tons of its raw cotton; the balance is exported.

In 1967 Iran produced about 71,600 tons of vegetable oil. Cottonseed is the major oilseed produced. Smaller amounts of flaxseed, sunflower seed, sesame, castor beans and others are grown but total production is only about half the country's domestic needs. A program therefore is underway to encourage farmers to produce more oilseeds, thereby increasing their earnings and saving millions of dollars in foreign exchange spent for the import of vegetable oils. In

1968 Iran imported 70,425 tons of vegetable oils.

Unfavorable weather for almonds, especially in Azerbaijan, accounts for the small almond crop of 20,000 tons in 1969. The 1968 crop amounted to 26,000 tons. Walnuts, on the other hand, had a good year; the 6,000-ton 1969 harvest slightly exceeded the 1968 crop. Pistachios, important in the Kerman area of Iran, produced a record 15,500 tons in 1968. In 1969 although conditions were not particularly unfavorable, the output dropped to 7,000 tons due to the cyclical nature of the pistachio. The overall quality of the 1969 harvest was better than in 1968.

Sugar production has steadily increased since the mid-1960's. Raw sugar at 217,000 tons in 1965, climbed to 457,000 tons in 1967 and to 582,000 tons in 1969. About 10 percent of this is cane sugar and the balance is beet. Both beet and cane production have been increasing. A government goal is to increase sugar production until Iran is self-sufficient. To accomplish this, sugar production must increase about another 100,000 tons, and then continue to keep up with population growth.

Production of dates appears to have leveled off in recent years. The 1969 harvest at 280,000 tons likely surpassed the 1968 harvest, but was not outstanding. Early spring frosts and fungus disease reduced the apricot harvest to below half the 1968 crop. Raisins also suffered from frosts and fungus, and production was only about 56 percent of the 1968 crop. The 1969 harvest of apricots was estimated at 4,000 tons and raisins, 34,000 tons.

Better pasture conditions in recent years have allowed an increase in livestock numbers. Even so, the output of meat and dairy products is not sufficient to meet growing demand. To a degree, stepped-up imports of both live animals and frozen meat are helping to solve the problem, but the shortage is still critical.

The poultry industry is expanding rapidly and price levels have been favorable for broiler production.

Roughly half the meat consumed is sheep and goat meat; the balance is beef,

buffalo and poultry. Per capita meat consumption averages about 34 pounds, but only 2 pounds is poultry meat. For comparison, Europe's per capita consumption of poultry alone is well above Iran's per capita consumption of all meat.

Agricultural Policy

Under Iran's third development plan, agriculture had an annual growth rate of about 3.4 percent. Under the fourth plan (running from 1968/69 to 1972/73) the goal is placed at a 5 percent rate. Use of increased inputs is one method being used to improve crops. During the fourth plan period, annual fertilizer usage (which amounted to about 72,000 tons at the end of the third plan) is to be doubled, irrigation increased, and new varieties promoted--especially wheat and barley. In addition, mechanization of farming will be increased by about 40 percent.

Through these developments and by various institutional means such as the encouragement of large-scale farming, agricultural development is being integrated with the country's agrarian reform program. In some areas numerous joint-stock farming companies are being set up with small farmers as shareholders. In other areas, especially where new or unused land is being opened up by irrigation as in areas of the Khuzistan, large-scale farming units are being developed as agribusiness ventures.

A large research center is being developed for experimental work with new disease resistant, high-yielding varieties for a number of crops; sugar production continues to be promoted; and vegetable oil production is aimed at gaining a level of self-sufficiency. Though most oilseeds are grown in Iran, sunflower seed apparently has become the most popular in the current expansion program.

Foreign Trade

There was little change in agricultural exports from 1968. They accounted for 44 percent of all exports when petroleum is excluded, and about 7 percent of total exports. However, agricultural exports increased by almost \$23 million over the prior years. Leading export items were cotton, fruits and vegetables, hides and skins, and wheat. The

United States ranked second as a buyer of Iranian farm produce purchasing mostly hides and skins, nuts, fruit, and gums.

Iran's agricultural imports made up only 8.8 percent of total imports and the principal farm commodities imported were cereals and vegetable oils. The United States ranked second as supplier of Iranian imports. Farm items sold by the United States were principally wheat and vegetable oils. (H. Charles Treakle)

IRAQ

Although a fair percentage of Iraq's cropland is irrigated, crop yields, especially wheat, still fluctuate with the amount of rainfall. In the 5 years before 1968, wheat crops were poor. But in 1968, and again in 1969, wheat production totaling at or near 1,200,000 tons was more than enough to meet the domestic consumption. Virtually all crops have improved from the levels of earlier years. Preliminary reports indicate that the 1969 level of production was slightly above the 1968 outturn.

Increasing oil revenues in the 1950's allowed a number of large irrigation projects to be built, but these failed to produce the anticipated early gains for the individual farmers. Land reform was just started, when administratively it was allowed to mark time. However, activities and work have gone forward in other areas. A good start has been made at growing sugarcane, a sugar factory has been built, and new varieties of cereals have been introduced. Inputs, especially the use of fertilizer, have been promoted for improving the rice crop.

Notable progress has been achieved in poultry production for both meat and eggs. With the help of the FAO and the United Nations, inoculation and dipping projects have improved livestock health. Progress has also been achieved in agricultural extension and in promoting cooperatives which will be important as the agrarian reform program progresses.

Agricultural Production

Agriculture accounted for about 26 percent of the gross national product in

1962 but has now declined to about 22 percent. After oil, farming is the most important sector of the economy and employs the greatest number of people.

Winter crops, principally wheat and barley, vary in production with the amount and the timing of rainfall in their growing area. In 1969, the timing and distribution of precipitation was favorable. Though not equaling the bumper crop of 1968, wheat was reported at 1,189,000 tons. Barley output, at 730,000 tons, was highly satisfactory.

Summer crops account for only about 7 percent of the cultivated area. Much of this cropland is irrigated, and therefore is not so dependent on precipitation. The principal summer field crops are rice, cotton, tobacco, millet and sorghum, corn, summer pulses and vegetables. Their production levels have held fairly constant for the past 5 years. Rice, however, is an exception. There has been special attention given to increasing the rice area. In 1967, the government distributed fertilizer to rice growers and now have served about a quarter of the area in rice. Also, the FAO and a U.S. private foundation have assisted in experimentation work with new varieties. Rice production responded to these efforts with sharply increased yields. The 1969 paddy rice harvest was estimated at 500,000 tons, up 50,000 over 1968.

Iraq now has a sugarcane plantation which is a going concern. The government contracted with a U.S. company to design, lay out, and carry through the development of a sugarcane plantation similar to the one it engineered for Iran. By the end of 1969 there were an estimated 2,000 Iraqis working on the project and in the sugar mill constructed as part of the undertaking. Iraq uses about 250,000 tons of refined sugar annually and the sugar mill at the Amarah sugarcane plantation will be able to refine 100,000 tons. Roughly a third of the raw sugar for this mill will be produced by the new sugarcane project. The complex is located in Amarah Liwa (province), near the village of Mujai Al Kabir and watered by the river of the same name, a branch of the Tigris.

Production of dates, Iraq's principal agricultural export, fluctuated during the 1960's. In some years poor ripening weather

was blamed for the smaller crop. In 1967 heavy infestation of pests caused the output to drop to 270,000 tons. Conditions were better in 1968 and the harvest was reported at 322,000 tons. This was far from a record crop, but considerably better than the 290,000 tons estimated for the 1969 harvest.

Agricultural Policy

Iraq is just beginning a new 5-year plan--1970-74--which allocated 41 percent of the funds for agriculture. Improvements have been made in the administration and implementation of agricultural projects such as the sugarcane project. Increases in irrigation and drainage are underway. Planners appear to be hedging against the country's great dependence on weather while battling salinity, the great robber of good irrigated land.

Plant breeders have joined the "green revolution" with the introduction of the new varieties of Mexican wheat and some new rice strains developed at the International Rice Research Institute in the Philippines. Other projects include a fertilizer program for rice, supervised credit, additional grain silos and storage sheds, and agricultural marketing facilities.

Foreign Trade

Petroleum accounts for roughly 90 percent of Iraq's exports. Excluding petroleum, and striking an average for the 1960's, over two-thirds of Iraq's export revenues came from agricultural products, principally from the marketing of dates, wool, cotton, hides and skins, barley, and in some years wheat. The trend, however, has been downward. Agricultural commodities which accounted for over 83 percent of the non-oil exports in 1963, had roughly a 54-percent share in 1967. Part of this decrease reflected a drop in the value of date exports and an increase in industrial exports, principally cement.

Prior to 1958 cereal exports, principally barley, exceeded date exports but they did not challenge dates as the leading export item of the 1960's. In 1967 (latest full year available) Iraq exported agricultural products valued at about \$31 million and imported foods worth some \$74 million.

Principal food imports were sugar, cereals, tea, vegetables oils, and fruit and vegetables.

It is trade policy to require import licenses and exchange permits. Exchange control is administered by the central bank. There are prohibited and suspended import lists which protect home production and control imports. The import program--amount of total imports allowed each year--is broken up by the Ministry of the Economy for licensing. Divisions are nondurable consumer goods, durables, and capital goods. (H. Charles Treagle)

ISRAEL

The Israeli economy in 1969 continued its vigorous recovery with a GNP increase of approximately 10 percent. This accompanied a substantial trade deficit and a severe depletion of foreign exchange reserves. In 1968 Israel experienced a trade deficit of \$440 million; in 1969 it grew to an estimated \$544 million. Some measures have been adopted to ease the deficit. In recent years, inflation has been tightly controlled and labor and government have held down wage increases.

Agricultural Production

Agricultural production slipped about 1.5 percent in 1969. Following the record 1967 crop of 222,000 tons, wheat production declined to 175,000 tons the following year and to 145,000 tons in 1969. Hindering growing conditions were heavy flooding in the northern part of Israel in late December 1968 and early January 1969 and extremely dry weather in the Negev.

The barley crop for both 1968 and 1969 was pegged at 25,000 tons--less than half of the 1967 crop. The grain sorghum crop failed to match the 21,000 tons produced in 1968. Israel does not depend on the domestic production of feedgrains to fulfill its domestic needs. Almost all Israeli feedgrains are imported, mostly from the United States.

In November 1969, the government concluded a 5-year agreement covering grain shipments from the United States in 1970-74.

The Israelis are pursuing the work on high-yielding varieties of wheat and other crops. They plan to increase domestic production and reduce some import needs. The area for wheat rose from 44,500 hectares (110,000 acres) in 1959 to close to 100,000 hectares (250,000 acres) in 1969. Yields also increased. Wheat yields are, however, closely tied to rainfall, especially in the extensive wheat fields in the south. New wheat varieties are undergoing intensive local selection and yields of 30-40 bushels per acre have been achieved under favorable conditions. Certain dwarf varieties were yielding an outstanding 80-90 bushels per acre, but the grain showed poor baking properties. According to present plans, the Israelis hope to develop a wheat strain which in combination with the skilled use of fertilizer and irrigation will produce around 100-120 bushels per acre. This, they hope, will produce an annual crop of close to 300,000 tons, which would meet approximately three-fourths of their domestic requirements.

Grain prospects for 1970 are not good. Drought conditions in late 1969 and early 1970 have severely affected the prospects in the South, the major grain producing area.

Israel's output of cotton reached a record 35,000 tons in 1969. Heavy stocks at the end of the marketing year made approximately 15,000 tons available for export, double the movement of the previous marketing year.

A slight frost in some parts of the main citrus producing areas, unusually heavy and persistent rainfall in January and February causing severe damage to exposed areas, and an off year in the biannual production cycle of most citrus varieties caused a slight decline in the total production of citrus in 1969. The main drop occurred in Shamouti which contributed 50 percent of the total production compared with 54 percent the previous year. There was no significant change in the citrus producing area. Losses of old plantations have been offset by new plantings coming into production.

The production of vegetables continued to increase, particularly potatoes, tomatoes,

radishes, cabbages, and other green-leaved vegetables. Also, there has been an increase in vegetables planted under plastic, mainly for export to Europe.

Although olive groves are traditional in the Middle East, today most vegetable oil in Israel is crushed from soybeans imported from the United States. Extract from domestic oilseeds falls short of the domestic requirement.

Agricultural Trade

Citrus continues to be the top export of Israeli agriculture. Approximately 750,000 tons of fresh citrus out of a total production of 1.2 million tons were shipped during the 1968/69 season. The export value of this fresh fruit approximated \$90 million. In addition, about \$30 million of processed citrus products were exported. Other items such as avocados and strawberries are finding good markets in Europe. Many of these are air-shipped and of exceptional quality when they reach the market. In 1968/69 close to 4,000 tons of avocados were exported. Plans call for avocado production of 20,000 tons by 1980 with some 15,000 tons available for fresh export.

Israel, beginning in 1965, moved into the flower exporting business. Flowers are grown in plastic houses, then picked, wrapped, and shipped almost immediately to European markets.

Israel continues to increase its exports of cotton and during 1968/69, it shipped about 8,000 tons. The most significant development in cotton exports during the past year was the increase in exports to East European countries. They took 39 percent of Israeli cotton exports. The EC countries accounted for 35 percent of the total. Other products which are exported are peanuts and high-quality seed, both vegetable and grain.

On the import side Israel still gets 50 to 60 percent of its wheat from overseas, particularly from the United States under a P.L. 480 program. Most of the feedgrains continue to be imported.

Israel's cotton imports, however, have declined and totaled 4,700 tons during this period. The United States supplied 9 percent

compared with 21 percent (1,302 tons) in 1967/68. Imports from Latin American countries increased and accounted for approximately 15 percent of total imports. Although imports from Africa declined to 1,649 tons, the share of the market remained the same as for 1967/68. Israelis consume around 100,000 tons of sugar. Around 30,000 tons are produced locally from sugarbeets; the rest is imported.

Last year almost 40,000 tons of frozen meat were imported--mostly from South America. Israel is self-sufficient in fruits, vegetables, milk products, and eggs. (Michael E. Kurtzig)

JORDAN

The Jordanian economy continues to make good progress from the disruption and losses of the June 1967 war with Israel. Heavy spending, made possible by the large contributions from other Arab governments, has sustained demand and employment. Preliminary estimates for 1969 show that overall farm output was around 60 percent larger than in 1968. The 1969 index of agricultural production stood at 249 (1957-59 = 100).

Agricultural Production

Timely and above average rainfall in the winter produced excellent 1969 crops on the East Bank.

The wheat crop increased by close to 50 percent to about 260,000 tons and the barley crop reached 85,000 tons, nearly 55 percent larger than in 1968. The West Bank produced about 70,000 tons of the wheat and 25,000 tons of the barley. While trade continues between the East and West Bank, it is nowhere near the prewar volume.

Part of Jordan's vegetable and citrus crops never materialized due to the damage done to the East Ghor Canal. Daily fighting in this area kept most farmers from their fields. Damage to the canal curtailed the much needed water for the citrus, banana, and other crops grown in this area.

The relatively abundant rains aided pastures which contributed to an increase in livestock and their products.

Agricultural Policy

There have been no significant changes in Jordanian agricultural policy during the past year. Jordan does not have price supports or subsidies except for wheat, mostly seed wheat. The purpose of the support price is largely to assure supply of seed wheat that may be sold to farmers. The price of locally produced tobacco is fixed by the government in conjunction with the cigarette industry.

In 1969 the Agricultural Marketing Corporation (AMC) a concern of government, farmers, and merchants, was established to regulate the export of agricultural produce, primarily vegetables and fruits, and to promote market development. Although this organization is broadly based, it has to date dealt primarily with tomatoes. During the height of the tomato harvest, the AMC arranged for the sale of about 6 tons of tomatoes daily to a processing plant in Iraq. Some 3,000 tons of tomatoes were sold to Iraq during the season.

The AMC is also negotiating with the Royal Jordanian Airlines to reduce the costs of air shipping fruits and vegetables to Europe and to the Arabian Gulf. Shipments of squash, melons, and sweet peppers to Europe during 1969 were encouraging.

Assistance is being received from USAID in the fields of wheat production, and from the United Nations in the production of tobacco and olives. Direct aid from the United States is being implemented in a project designed to develop and improve wheat farming in Jordan that will hopefully double the yields. Under consideration is a project to increase the yields of vegetables from improved varieties, better cultural practices, optimum use of irrigation water, and use of fertilizers and pesticides.

The United Nations is also involved in other projects, including 8 in agriculture and related fields. Introduction of high-yielding drought-resistant varieties, crop rotation, use of fertilizers, use of insecticides and farm machinery, improvement of livestock, and the improvement of range are among the aims of these projects in the development of Jordanian agriculture in rain-fed areas. The United Nations is also interested in increasing and improving the

tobacco grown in Jordan with the introduction of high-yielding varieties and the establishment of curing facilities. A project begun in early 1968 aims to enhance the effectiveness of the veterinary department and to control animal diseases.

West Germany is providing insecticides and vehicles as well as technical assistance in soil fertility, veterinary services, and irrigation.

The United Kingdom is providing assistance in drilling wells and constructing irrigation systems.

Agricultural Trade

The Jordanian import pattern should remain the same as in the past years for rice, sugar, tea, coffee, and other agricultural commodities not produced in Jordan. Trade in wheat, feedgrains, and other commodities produced in Jordan depends on domestic production which in turn depends directly on growing conditions.

The United States continues to be the major supplier of wheat to Jordan. In 1970, an estimated 115,000 tons of wheat and wheat flour will be needed. Most, if not quite all, of the wheat imported by Jordan in recent years has come from the United States under the P.L. 480 program. The bulk of the flour has been supplied by United Nations Relief and Works Agency and other donors. (Michael E. Kurtzig)

LEBANON

Lebanon's agriculture was generally favored with abundant precipitation during the 1969 growing season. There were some exceptions. The apple crop suffered hail damage in May. A December dry spell caused maturing olive fruit to be more susceptible to the Olive fly (*dacus olea*). And heavy rains caused delays in planting vegetables, lowering production from what might have been a record crop. The heavier rainfall did provide more moisture for forage growth and livestock had a good year.

Because of a poor apple crop, agricultural production did not reach the level of the prior 2 years. To supply domestic requirements, there were the normal imports

of agricultural items; wheat, as usual, led the list. In Lebanon's predominantly mountainous countryside, expansion of agriculture is limited, but agriculture still is an important contributor to the economy. It contributes some 12 percent of the gross national product, and employs nearly half of the labor force as well as supplying about half of the value of all exports.

Agricultural Production

Lebanese farm output in 1969 slumped about 11 percent to an index of 154 (1957-59 = 100).

Roughly two-thirds of agriculture's contribution to Lebanon's economy is provided by crops. Livestock, however, has been making rapid strides in recent years. Commercial egg production has been stepped-up and fluid milk production has been increased through modernization of some dairy farms. In 1969, better than average precipitation provided good pasture conditions which were reflected in a good calf, lamb, and kid crops and a resulting increase in red meat and milk. Despite the improvements, Lebanon's livestock industry is still underdeveloped and it is still a long way from meeting domestic requirements. The market for broilers was erratic during 1968 and 1969. Therefore, broiler production, which in recent years has been edging upward, increased only slightly. Egg production which has shown recent gains, held steady in 1969.

There have been no substantial changes in the area planted to grains in the last 3 years, except in 1969 corn acreage increased slightly due to a government support of a small hybrid seed corn program. The area under cultivation of grains is about 38 percent of the total cultivated area but it produces only about 15 percent of the domestic cereal requirements.

Wheat production, at 50,000 tons, was above last year's crop, but well below the production in any of the previous 3 years.

A large number of strains of new high-yielding Mexican varieties have been grown under irrigation. These were experimental for a supply of seeds. This program was carried out by a U.S. foundation working with the government on a 10-year program for wheat and barley. In 1969 some 280 hectares

(about 700 acres) were seeded to Mexipak and other varieties of Mexican wheat which produced 935 tons--just over 50 bushels per acre. In the fall of 1969 the Cereals Office distributed 263 tons of the best yielding strains and an estimated 3,090 acres were seeded for commercial production of Mexipak.

Lebanon farmers have taken considerable interest in a new strain of wheat called "Najah," developed locally. It is a higher yielding variety of dryland wheat that matures early. Since it is a dryland wheat it does not compete directly with Mexipak; its taller straw is not as tough as Mexipak's. Najah (which means success) was developed by Dr. W. W. Worzella of the American University of Beirut and has been tested for yield and other agronomic characteristics since 1962. In late 1968, news of this variety was released to the public and some seed was distributed to farmers.

Najah was specifically developed for Lebanese areas receiving about 16 inches of rain from November to May. However, it might well prove a good wheat for areas with similar conditions in the Middle East and around the world.

Najah is light red and hard textured. When tested in 1964-66 Najah headed about a week earlier than the local wheats--Florence Aurore and Hurani--and contained 14.6 percent protein, which also topped the local wheat's protein content.

Lebanon's barley, potato, and onion crops showed increases and were above average crops. Sugarbeets and tobacco produced at about the same level as in 1968, but many vegetables were affected because planting was delayed by spring rains.

The citrus fruit crop in Lebanon has changed little in recent years. Increases in production have been small but steady, and losses due to adverse weather have been more than offset by new bearing trees. This gradually growing production has brought increases in sales of fresh and processed fruit in both domestic and foreign markets. The 1969 crop of citrus was good in quality and size and a record crop despite hail damage in the spring. Preliminary figures listed 135,000 tons of lemons. Weather conditions were generally favorable with ample

rainfall during the growing season which was somewhat delayed.

Lebanon's main fruit crop, apples, fared very poorly. The abnormally wet spring, the hailstorms, and hot winds resulted in serious damage of both the apple and the pear crop. The pear crop is never large but production dropped 70 percent below the 1968 crop. The apple crop at 70,000 tons--was only 41 percent of the 1968 crop. This drop in apple production was responsible for the overall drop in agricultural production in 1969. The small apple and pear crop brought higher farm and consumer prices but generally apple prices in recent years have been so low that large and small growers have tended to reduce care such as pruning, thinning, spraying, and fertilizing.

Agricultural Policy

Lebanon's Ministry of Agriculture allocated over \$1.7 million of its 1970 proposed budget to agriculture of which more than half is earmarked for research. This total allocation is an increase of about \$325,000 over the 1969 allocation and represents about 30 percent of the total 1970 budget for agriculture.

The rising cost of obtaining seasonal workers for sugarbeet production has prompted the government to begin a 6-year program for experimental mechanization of sugarbeet production.

For the first time, a support price of almost 8 cents per kilo was set in 1969 for hybrid corn. The Government Cereals Office supplied the hybrid seed. As mentioned above, the Cereals Office also has a 10-year program to improve wheat and barley, and has been one of the countries of the Middle East that began early experimental work with high yielding varieties.

In response to a request from Lebanon for assistance, the European Community has agreed to supply 15,000 tons of wheat which will be sold in Lebanon, the proceeds of which will be used for financing development projects.

Foreign Trade

Traditionally, Lebanon has had a net trade deficit. The latest available annual

trade statistics show that in 1967 exports totaled about \$143 million and imports amounted to around \$474 million. Lebanon exports approximately a quarter of its agricultural production and this export amounts to about half of all exports. Apples, citrus, vegetables, and poultry products are the principal farm items sold and, for the most part, these go to Lebanon's Arab neighbors.

Lebanon has had an upward trend in its marketing of fruit in recent years, but it has also had problems disposing of the large apple crops. In 1968 the crop went begging for markets, but the weather damage to the 1969 harvest reduced the amounts of apples marketed to just over 40 percent of the 1968 figure.

During the 1960's Lebanon's pattern of imports changed very little, but since June 1967 there has been some shift in trade partners. The source of poultry feed has shifted from the United States to Western Europe. There has also been increased trading with Eastern Europe. At the present, however, at least two American products enjoy preference--toasted soybean cake and tobacco.

Trade policies and the trading system are relatively free of restrictions. There are no restrictions on payments of current accounts or on transfers of capital. Lebanon has bilateral trade and payments agreements with several countries, mainly to promote exports of apples and citrus and to encourage the use of Lebanon's free zone facilities.

Lebanon has signed a trade and cooperation agreement with the European Economic Community. This renewable pact includes exchange of products and coordination of technical assistance. (H. Charles Treacle)

SYRIA

Spring rains and flooding delayed and reduced planting in some areas of Syria, resulting in shorter 1969 crops and the need to import wheat.

A good portion of the agricultural output, which accounts for about one-third of the country's economic production, comes from farmed drylands and is thus subject to

vagaries of the weather. In good crop years Syria exports wheat and barley, but in years of poor harvests, the trade in these commodities can be reversed as it was for wheat in 1969.

Recent efforts have been made to reduce these wide variations and upgrade yields. New wells and small dams have been completed and others will soon be functional. These will provide enough water to add at least 200,000 acres to the irrigated area. Other measures include preferential credit for farmers and a wider use of fertilizer.

Agricultural Production

Syria's estimated agricultural outturn in 1969 was almost 6 percent less than in 1968 and dropped to an index of 128 (1957-59 = 100).

Wheat production has had a history of irregular production. In its record year, 1962, wheat production reached almost 1.2 million tons but in the fairly good years of 1964 and 1965 it produced 900,000 tons. In 1969, despite predictions of an excellent crop early in the season, the wheat harvest of 600,000 tons was disappointing and required imports to meet the normal consumption requirements of about 800,000 tons per year. Barley, though only a fair crop, was reported better than the 1968 crop. By November 1 about 110,000 tons of barley had been imported.

The 1969 cotton crop dropped to 142,000 tons compared with 153,000 tons in 1968. Despite this reduced outturn, a mid-October report indicated that the purchase price of delivered cotton had dipped 1.5 percent below the 1968 price.

Syrian tobacco production has held fairly steady in recent years and was estimated at 12,000 tons in 1969. This crop, along with cotton, is an important export commodity and is considered an industrial crop that can be improved and expanded. Late in 1969 officials of the Tobacco Monopoly reviewed the results of tobacco cultivation trials and concluded arrangements for the opening the Tobacco Research Institute in Latakia. The Institute has already signed a contract with FAO for development assistance.

Sheep constitute the greatest part of Syrian livestock and number around 8 million. Numbers have been increased as was the stated policy of the second plan. The government wants to raise this to 10 million head and has been pushing the production of feed and fodder.

Agricultural Policy

Syria's second 5-year plan (1966-70), which was comprehensive in scope, placed considerable emphasis on agricultural development. Its 27-percent share in the public investment reflects the importance of agricultural development in sustaining general development. The second plan anticipated annual increases of 7 percent in GNP and 4.2 percent in agricultural production.

Objectives of the plan were illustrated by a listing of percentage increases desired for individual agricultural commodities. The items slated for the greatest increase were: green fodder, sugarbeets, yellow corn, citrus, peanuts, broad beans, and apricots. Ten other food crops and tobacco were listed above irrigated cotton which the planners calculated to increase only by 33 percent. Apparently cotton, though an important export crop, had to take its place behind food crops in priority.

In June 1968 the planning structure was reorganized in Syria making 10 ministers and the governor of the central bank members of a supreme planning board headed by the Prime Minister. This change replaced the ministry of planning with a state planning commission which serves as a technical secretariat of the supreme planning board. The change was made to promote better coordination and follow-up of planned programs.

Since it is very costly to bring new lands under cultivation, the supreme planning board has especially promoted efforts to increase yields for quick gains--such as increased use of fertilizer, better varieties, and improved methods, which were stressed in 1968 and 1969.

As 1970 began the Syrian cabinet approved the unified general state budget amounting to 2.78 billion Syrian pounds of

which 1.538 billion is allocated for investment in development expenditures. Of the investment expenses, agriculture and agrarian reform were allocated 529 million or 37.8 percent of the total. Besides this, agriculture will benefit from many other development expenditures.

There will be almost a doubling of the area under irrigation when the Euphrates Dam, now under construction, and the related irrigation scheme is completed.

From the Kuwait Fund for Arab Economic Development, a loan of \$8.4 million has been negotiated for the construction of grain silos and warehouses which should be completed by the end of 1972. The first stage of the plan entails construction of grain-storage facilities in Damascus and Homs for some 112,000 tons to be completed by the end of 1970. In the second stage (work to be complete by the end of 1971) silos will be built in seven other major towns.

Syria's work with new varieties of wheat and other crops and assistance extended by the FAO and the United Nations Development Fund will help to give agriculture an additional boost. Also, the government has already invested \$50 million in developing the Ghab Valley and expects to allocate about \$13 million more in the next several years for field drainage, irrigation networks, machinery, breeding stock, and market facilities.

Foreign Trade

Preliminary figures released by Syria showed that exports for 1968 amounted to some \$177 million and imports rose to \$314 million, leaving a trade deficit of \$137. This was an increase over 1967 by 14 percent for exports and 18 percent for imports. Exports rose for trade with Arab countries and the European Community and fell by 11 percent for the East European markets. Imports, however, rose from both Arab and East European countries over 1967 imports.

In 1968 agricultural items contributed just over two-thirds of the total value of all exports. These items were principally raw cotton, accounting for about 37 percent, and livestock supplying some 16 percent of the value. Smaller amounts of fruit and vegetables, wool, barley, wheat, and tobacco represent most of the other items sold.

Syria's foreign trading system is based on two different exchange markets. There is the official market that applies to specified items, including such agricultural items as wheat, barley, and cotton. The other is a parallel or free (but managed) market that applies to the remaining items not under monopoly listing, or not restricted by prohibition or suspension.

Almost half of Syria's foreign trade is nationalized and is carried on by nine government organizations which have monopoly power. For 1968, these organizations handled about 43 percent of all imports and 52 percent of all exports.

Also complicating free trade with Syria have been special taxes. Where import licenses are required (except of certain items from Arab countries in accordance with the Arab Common Market Agreement) there is a 2-percent license tax. There are six other separate taxes collected by customs officials on imported items. All exports of agricultural commodities except cotton, are taxed at a rate of 10 percent ad valorem. Cotton exports are taxed at an ad valorem rate of 12.5 percent.

Syria maintains bilateral payments agreements with 11 countries but the percentages of total trade on these agreements dropped in 1968 to about a quarter of the export and imports. After the June 1967 war, restrictions on imports were tightened to guarantee the purchase of essentials. In February 1969 these restrictions were terminated and exchange licenses have been dropped for free market trade, but kept when purchases are made through the official market. (H. Charles Treagle)

TURKEY

Agricultural Production

For the second consecutive year, Turkey had a disappointing wheat crop. This, coupled with lower production of oilseeds, cotton, nuts, deciduous fruit, citrus, and a drastically reduced olive crop, contributed to a drop of 4 percent in agricultural output in 1969. Slight increases in production of other grains, vegetables, pulses, and livestock products were not enough to offset the general downtrend.

A cool spring and a sudden dry spell in late May caused a drastic reduction from the expected wheat harvest. The crop of 8.3 million tons was 100,000 tons below the 1968 crop and well below the record 1967 crop of 9 million tons. Mexican wheat production was affected less severely than other wheat. After heavy flooding in the Adana area early in January 1969, the crop recovered well. Approximately 2.1 million tons of Mexican wheat were harvested. It was produced on roughly 12 percent of harvested wheat acreage.

Barley production was up by 100,000 tons over 1968 at 3.6 million tons while corn production was up as well by 100,000 tons.

The outlook for the 1970 wheat harvest is only fair because of unusual weather. The fall rains which usually begin in late September did not begin until mid-November. When the rains began, there was heavy flooding in the Aegean and the Cukurova regions. The delayed rains also caused a slowdown in planting in the Anatolian Plateau and in some cases winter wheat was not planted before cold weather. Flooding in the Aegean and the Cukurova areas prevented the planting of some of the Mexican wheat and this area may be devoted to cotton for the coming year. The total Mexican wheat planting for 1970 will likely be the same as 1969--approaching 1.5 million acres. If another poor wheat crop materializes in 1970, there should again be heavy imports of wheat.

Cotton production in 1968 was a record 435,000 tons. The current estimate puts the 1969 area and production at 10 and 11 percent, respectively, below the 1968 level. Production in the Aegean area was reduced by almost 18 percent from 170,000 tons harvested in 1968.

The 1969 tobacco area is estimated to be 229,000 hectares (566,000 acres) down 17 percent from 1968. This drop was mainly on bottom lands which were planted to other crops. The sharpest drop in tobacco production was reported in the Black Sea area. Total production for 1969 was estimated at 145,000 tons, down 10 percent from 1968 and 20 percent from the very high 1967 crop.

Although 1969 was an off year for filberts a crop of 100,000 tons was produced;

1969 was also an "off" year for almonds, walnuts, and pistachios.

In 1968 olive production reached a record 775,000 tons, producing 126,000 tons of pressed olive oil; 1969 was an off year and the production of olives declined precipitously to 350,000 tons. Because of prevailing dry weather the 1969 oil crop is estimated at 40,000 to 45,000 tons. Production of sunflowerseed was up by 50,000 tons in 1969 to a record 280,000 tons.

Recent reports indicate that Turkey is now self-sufficient in vegetable oils. Ten years ago Turkey was importing about one-third of its total vegetable oil requirement under P.L. 480 programs. Total production of vegetable oils climbed from 106,500 tons in 1959/60 to 304,200 tons in 1968/69. This drive for expanded vegetable oil production has been supported by the government and by union groups.

The livestock situation has been critical in eastern Turkey where, because of a long dry period, a significant feed shortage developed. Livestock numbers for the country continue to increase; they were up by 1.6 percent in 1969 and totaled 76.2 million head. But the major increase had shifted to cattle. This increase puts a further strain on the already meager grazing area of Turkey and on the critical feed situation. Slaughter of animals is also increasing but the carcass weights are declining. Exports of livestock and meat are up but still quite low. Per capita consumption of red meats is estimated at 14 kilograms per year.

Agricultural Policy

The general objectives of the agricultural policy of Turkey continue to be to attain self-sufficiency in all crops, to close the foreign exchange deficit by maximizing exports of traditional export crops, and to promote markets for new agricultural commodities. In the attempt to increase exports the Turkish government is giving special emphasis to fresh fruits and vegetables. Turkey, while trying to support growers, grants premiums to exporters to make their products more competitive. Russia continues to be a good market for Turkish raisins whereas other East European countries are taking more of Turkey's

tobacco. Both raisins and tobacco are in large supply in Turkey.

Foreign Trade

Exports of agricultural products except cotton showed increases in the first 9 months of the year. Greater exports of filberts, tobacco, and livestock (and products) were responsible for a good part of the increase. The substantial increase for tobacco exports (up by 15.8 percent during the first 9 months of 1969) was caused by delayed shipments to the United States due to the U.S. dock strike in late 1968 and early 1969.

The reduced 1968 wheat crop required Turkey to import wheat. In 1968, 553,000 tons were imported; 300,000 tons came under the P.L. 480 program. The poorer 1969 crop necessitated arrangements for half a million tons of wheat under the P.L. 480 program and the total wheat imports should reach close to 850,000 tons before the main 1970 harvest. These large shipments of wheat will again increase the value of the Turkish agricultural imports to \$50-60 million and will increase the U.S. share of Turkish agricultural imports. (Michael E. Kurtzig)

APPENDIX TABLES

<u>Table</u>		<u>Page</u>
1	West Asia and Africa: Indices of agricultural production, total and per capita, by country, 1965-69	46
2	West Asia and Africa: Indices of food production, total and per capita, by country, 1965-69	47
3	West Asia: Production of principal agricultural products, by country, averages 1957-59 and 1960-64, annual 1966-69	48
4	Africa: Production of selected agricultural commodities, by country, averages 1957-59 and 1960-64, annual 1967-69	50

Table 1.--West Asia and Africa: Indices of agricultural production, total and per capita, by country, 1965-69

(1957-59 = 100)

Region and country	Total					Per capita				
	1965	1966	1967	1968	1969 ^{1/}	1965	1966	1967	1968	1969 ^{1/}
West Asia:										
Cyprus	175	148	207	180	209	164	137	188	161	185
Iran	116	121	133	144	140	96	98	103	109	103
Iraq	108	104	105	122	120	86	81	81	92	89
Israel	176	167	195	203	201	137	127	146	148	143
Jordan	204	132	228	157	249	167	104	174	116	179
Lebanon	159	154	200	173	154	130	123	157	132	115
Syria	156	119	133	136	128	127	94	103	102	93
Turkey	117	130	135	137	132	98	106	107	106	100
Total West Asia	122	127	136	141	137	101	102	107	108	102
Africa:										
Algeria	94	68	83	96	84	82	58	69	77	65
Angola	131	139	142	140	146	119	124	125	122	125
Burundi	109	112	115	118	119	95	96	96	97	96
Cameroon	128	130	133	138	143	110	109	109	111	113
Congo (Kinshasa)	76	78	83	87	90	65	65	67	69	70
Dahomey	120	127	126	134	141	103	107	104	109	112
Ethiopia	116	117	125	127	131	103	102	106	106	107
Ghana	136	142	147	135	143	113	115	116	104	107
Guinea	100	97	102	110	114	82	77	79	83	83
Ivory Coast	168	153	188	177	191	141	125	150	137	144
Kenya	137	151	156	163	165	112	120	120	122	117
Liberia	109	108	118	119	121	98	95	102	101	101
Malagasy Republic	119	122	128	122	112	102	102	105	98	88
Malawi	131	144	151	134	132	111	119	121	105	101
Mali	104	113	120	111	130	91	97	101	92	106
Morocco	122	100	114	162	135	101	80	89	122	99
Niger	133	139	161	125	162	110	112	127	96	121
Nigeria	119	126	116	115	116	94	101	91	88	86
Rhodesia	143	153	143	107	139	115	120	108	78	99
Rwanda	90	99	119	112	116	73	78	90	83	83
Senegal	146	121	146	116	138	124	100	118	92	106
Sierra Leone	117	115	115	120	123	108	104	103	106	107
South Africa, Rep. of	116	124	154	132	132	98	103	125	104	102
Sudan	131	138	152	144	156	108	110	118	109	114
Tanzania	124	140	135	140	139	104	115	108	109	106
Togo	124	120	135	136	134	103	97	106	104	100
Tunisia	99	78	82	93	78	84	65	67	74	60
Uganda	123	123	124	132	130	103	101	99	103	99
United Arab Republic	118	113	114	115	122	99	92	91	89	93
Upper Volta	120	106	116	113	119	104	90	97	93	96
Zambia	153	190	221	170	166	125	151	170	127	120
Total Africa	119	119	126	124	127	100	98	101	97	97

^{1/} Based on preliminary data.

Table 2.--West Asia and Africa: Indices of food production, total and per capita,
by country, 1965-69

(1957-59 = 100)

Region and country	Total					Per capita				
	1965	1966	1967	1968	1969 ^{1/}	1965	1966	1967	1968	1969 ^{1/}
West Asia:										
Cyprus	173	149	209	181	211	162	138	190	162	187
Iran	113	119	132	142	137	94	96	102	107	100
Iraq	107	104	104	121	119	85	81	80	91	88
Israel	169	158	184	191	187	132	120	138	139	133
Jordan	204	132	228	157	249	167	104	174	116	179
Lebanon	159	154	202	173	152	130	123	158	132	114
Syria	145	107	131	124	117	118	85	101	93	85
Turkey	114	126	130	132	128	95	103	103	102	97
Total West Asia	118	123	133	137	134	98	99	104	105	100
Africa:										
Algeria	94	66	83	96	84	82	56	69	77	65
Angola	114	116	119	121	124	103	104	105	105	107
Burundi	113	117	118	121	124	98	100	99	99	100
Cameroon	118	121	124	130	134	102	102	102	105	106
Congo (Kinshasa)	78	79	84	88	90	66	66	68	70	70
Dahomey	119	125	124	133	140	103	106	103	108	111
Ethiopia	116	116	124	126	130	103	101	105	105	106
Ghana	136	142	147	135	142	113	115	116	104	106
Guinea	101	100	103	111	116	83	80	80	84	85
Ivory Coast	153	171	179	181	190	129	140	143	140	143
Kenya	123	136	154	154	150	100	108	119	115	106
Liberia	104	95	98	97	98	93	84	85	82	82
Malagasy Republic	119	125	127	124	113	102	105	104	100	89
Malawi	128	226	291	207	228	108	186	233	162	174
Mali	101	109	114	103	121	88	94	96	85	98
Morocco	123	101	115	164	136	101	81	89	124	99
Niger	133	139	161	125	162	110	112	127	96	121
Nigeria	119	125	116	114	115	94	101	91	87	85
Rhodesia	132	142	141	105	154	106	111	106	77	109
Rwanda	90	99	119	112	116	73	78	90	83	83
Senegal	146	121	146	115	137	124	100	118	91	106
Sierra Leone	116	116	115	120	123	107	105	103	106	107
South Africa, Rep. of	115	127	161	133	133	98	105	130	105	103
Sudan	122	122	140	120	132	100	98	109	91	97
Tanzania	119	128	130	133	134	100	105	104	104	102
Togo	119	124	130	132	135	99	100	103	101	101
Tunisia	99	77	82	92	77	84	64	67	73	60
Uganda	114	115	115	116	117	96	94	92	91	89
United Arab Republic	117	117	120	121	124	98	96	96	94	94
Upper Volta	120	106	115	110	115	104	90	96	90	93
Zambia	133	187	251	170	170	109	149	193	127	123
Total Africa	116	118	125	122	124	97	97	100	96	95

^{1/} Based on preliminary data.

Jordan														
Average:														
1957-59	130	41	1	--	5	48	4	1	--	--	--	--	n.a.	n.a.
1960-64	133	46	1	--	5	67	23	1	--	--	--	1	4	12
1966	101	23	1	--	7	62	40	1	--	--	--	2	48	13
1967	226	80	1	--	7	28	49	1	--	--	--	2	47	11
1968	173	55	2	--	7	25	50	--	--	--	--	2	47	11
1969	260	85	2	--	7	40	63	--	--	--	--	2	48	12
Lebanon														
Average:														
1957-59	38	6	4	--	3	40	96	--	--	--	--	4	4/ 63	21
1960-74	38	8	2	--	3	35	137	--	--	--	--	4	34	33
1966	60	10	2	--	5	31	183	--	--	--	--	6	113	30
1967	70	12	2	--	4	37	195	--	--	--	--	6	125	33
1968	45	5	1	--	2	35	199	--	--	--	--	7	120	30
1969	50	12	1	--	4	34	200	--	--	--	--	7	120	35
Syria														
Average:														
1957-59	677	350	13	2	19	177	3	--	100	226	7	62	305	97
1960-64	728	472	11	1	27	232	5	--	143	328	7	106	210	86
1966	400	150	7	1	30	235	7	--	140	288	9	140	225	100
1967	800	400	9	1	25	240	8	--	126	256	12	150	230	105
1968	600	300	9	1	22	230	8	--	153	311	12	175	230	100
1969	600	350	9	1	25	230	8	--	142	288	12	200	230	100
Turkey														
Average:														
1957-59	6,486	3,110	883	164	289	2,452	223	--	170	304	121	2,651	3,664	361
1960-64	6,979	3,219	979	160	282	2,666	328	--	243	404	130	3,596	3,854	437
1966	8,200	3,500	1,000	208	275	2,800	445	--	382	611	164	4,422	4,322	470
1967	9,000	3,800	1,080	200	288	3,128	541	--	396	634	183	5,253	4,426	455
1968	8,400	3,500	1,000	173	293	2,900	581	--	435	700	162	4,716	4,451	469
1969	8,300	3,600	1,100	203	290	3,180	574	--	387	649	146	3,565	4,500	485
Total														
Average:														
1957-59	11,118	5,610	952	930	517	3,112	952	584	357	724	153	3,555	7,040	770
1960-64	11,470	5,738	1,023	1,218	502	3,425	1,276	631	518	1,022	165	4,935	7,326	952
1966	12,808	5,473	1,039	1,454	504	3,609	1,718	691	667	1,184	217	7,255	8,086	212
1967	15,165	6,155	1,130	1,575	530	3,933	2,034	531	676	1,191	241	8,622	8,467	262
1968	15,214	5,925	1,056	1,624	549	3,697	2,284	600	781	1,368	220	8,585	8,511	259
1969	14,529	6,107	1,159	1,750	536	4,002	2,243	570	726	1,347	206	7,702	8,504	276

1/ Data for 1969 are preliminary. 2/ Oranges and tangerines only. 3/ Oranges, lemons, and grapefruit. 4/ 1959 only.
 -- = None or negligible. n.a. = Not available.

Table 4.--Africa: Production of selected agricultural commodities, by country, averages 1957-59 and 1960-64, annual 1967-69

Country and year	Wheat	Corn	Sorghum: and millet	Rice, paddy	Cassava	Other crops	Citrus	Bananas and plantains	Sugar, raw	Peanuts: seed	Cotton	Tobacco	Coffee: beans	Cocoa: 2/2
Algeria														
Average:														
1957-59	1,198	8	--	7	--	249	345	--	--	--	--	15	--	--
1960-64	1,281	8	--	6	--	233	405	--	--	--	--	8	--	--
1967	1,266	6	--	6	--	204	400	--	--	--	--	13	--	--
1968	1,534	7	--	7	--	272	430	--	--	--	--	14	--	--
1969	1,250	6	--	6	--	275	440	--	--	--	--	14	--	--
Angola														
Average:														
1957-59	11	445	67	28	1,208	114	52	192	58	32	17	2	91	--
1960-64	15	420	67	27	1,279	134	69	193	65	29	12	3	162	--
1967	27	380	70	33	1,525	176	78	213	67	32	22	6	204	--
1968	27	407	75	33	1,545	172	80	213	68	32	30	7	186	--
1969	28	420	77	33	1,590	179	81	220	69	32	40	7	198	--
Burundi														
Average:														
1957-59	5	107	83	3	1,137	722	--	954	--	2	5	--	19	--
1960-64	6	97	107	3	863	680	--	1,135	--	2	5	--	15	--
1967	8	116	160	4	932	884	--	1,310	--	4	6	--	19	--
1968	9	118	160	3	930	895	--	1,325	--	4	6	--	17	--
1969	9	120	165	4	935	908	--	1,350	--	4	6	--	15	--
Cameroon														
Average:														
1957-59	--	168	351	11	759	837	--	660	--	68	15	2	32	63
1960-64	--	209	344	11	790	867	--	683	--	108	28	2	49	80
1967	--	275	500	13	847	930	--	650	--	126	35	4	66	92
1968	--	280	500	14	855	955	--	650	--	130	44	4	66	100
1969	--	285	510	14	870	975	--	665	--	135	49	4	66	105
Congo (Kinshasa)														
Average:														
1957-59	3	328	54	172	7,522	331	--	1,687	26	173	101	--	53	5
1960-64	2	268	41	66	6,760	294	--	1,380	35	132	45	--	59	5
1967	2	250	45	60	7,000	326	--	1,550	45	113	24	--	60	5
1968	3	255	47	70	7,200	338	--	1,600	45	115	35	--	60	5
1969	3	270	50	80	7,250	343	--	1,650	45	118	40	--	64	5

Table 4.--Africa: Production of selected agricultural commodities, by country, averages 1957-59 and 1960-64, annual 1967-69--Continued

Country and year	Wheat	Corn	Sorghum: and	Rice	Cassava:	Other	Citrus:	Bananas	Sugar:	Cotton- seed	Tobacco	Coffee:	beans	Cocoa
			millet	paddy		crops	plantains	raw				2/	2/	
South Africa, Republic of														
Average:														
1957-59	714	3,979	227	--	--	345	331	69	947	168	14	30	--	--
1960-64	863	5,106	260	--	--	415	437	41	1,079	223	17	27	--	--
1967	1,089	9,762	844	--	--	599	530	52	1,823	423	31	27	--	--
1968	1,272	5,316	207	--	--	626	520	54	1,505	217	44	38	--	--
1969	1,320	4,953	232	--	--	585	517	50	1,583	344	40	38	--	--
Sudan														
Average:														
1957-59	27	45	1,385	--	92	2	6	--	--	125	194	--	--	--
1960-64	31	30	1,585	--	115	4	9	--	--	232	289	--	--	--
1967	93	50	2,240	--	130	6	14	--	--	300	334	--	--	--
1968	95	52	1,150	--	132	6	14	--	--	250	357	--	--	--
1969	100	50	1,360	--	140	6	20	--	--	300	418	--	--	--
Tanzania														
Average:														
1957-59	13	537	978	83	1,000	263	17	782	23	34	70	3	22	--
1960-64	13	566	1,018	105	1,020	280	95	807	38	28	87	3	30	--
1967	35	700	1,145	115	1,120	319	110	870	82	11	141	8	44	--
1968	37	710	1,150	120	1,125	325	115	875	86	11	105	10	55	--
1969	37	715	1,155	125	1,130	332	120	885	91	12	144	10	48	--
Togo														
Average:														
1957-59	--	71	110	11	333	313	--	--	--	10	5	--	8	8
1960-64	--	75	87	12	358	380	--	--	--	11	7	--	11	13
1967	--	76	90	20	410	436	--	--	--	18	8	--	14	17
1968	--	70	90	20	410	436	--	--	--	18	5	--	15	19
1969	--	72	92	21	420	446	--	--	--	18	5	--	10	20
Tunisia														
Average:														
1957-59	514	4	4	--	--	32	81	--	--	--	--	2	--	--
1960-64	435	3	3	--	--	46	87	--	--	--	--	1	--	--
1967	282	1	2	--	--	79	77	--	--	--	--	2	--	--
1968	383	2	2	--	--	75	78	--	--	--	--	3	--	--
1969	350	2	2	--	--	78	72	--	--	--	--	3	--	--

U.S. Department of Agriculture
Washington, D.C. 20250

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE \$300



1514 UNALCS A422 18121 0001
USDA NATIONAL AGRICULTURAL
LIBRARY CURRENT SERIAL RECORD
WASHINGTON DC 20012